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# MACT IMPLEMENTATION STRATEGY

U.S. Environmental Protection Agency
Office of Air Quality Planning and Standards
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## Table of Contents

**Section** **Page**

## Table of Contents (continued)

**Appendices**

## List of Tables



## List of Figures

## List of Acronyms and Abbreviations

| | |
|---|---|
| AFS | AIRS Facility Subsystem |
| AIRS | Aerometric Information Retrieval System |
| AQSSD | Air Quality Strategies and Standards Division |
| ATIS | Air Toxics Implementation Strategy |
| CBEP | Community-Based Environmental Programs |
| EMAD | Emissions Monitoring and Analysis Division |
| ESD | Emission Standards Division |
| ITPID | Information Transfer and Program Integration Division |
| MACT | Maximum Achievable Control Technology |
| MACTRAX | MACT Tracking System |
| MWC | Municipal Waste Combustion |
| MWI | Medical Waste Incineration |
| NESHAP | National Emission Standards for Hazardous Air Pollutants |
| NETI | National Enforcement Training Institute |
| OAQPS | Office of Air Quality Planning and Standards |
| OECA | Office of Enforcement and Compliance Assurance |
| OGC | Office of General Counsel |
| ORE | Office of Regulatory Enforcement |
| PRG | Program Review Group |
| PRRMS | Planning, Resources, and Regional Management Staff |
| PTE | Potential to Emit |
| RATC | Regional Air Toxics Coordinator |

## List of Acronyms and Abbreviations (continued)

| | |
|---|---|
| RO | Regional Office |
| SBAP | Small Business Assistance Program |
| SBREFA | Small Business Regulatory Enforcement Fairness Act |
| SMIP | Specific MACT Implementation Plan |
| STAPPA/ALAPCO | State and Territorial Air Pollution Program Administrators/Association of Local Air Pollution Control Officials |
| TDA | Tool Development Agreement |
| TTN | Technology Transfer Network |

## GLOSSARY

**Air Toxics** - Any air pollutant for which a national ambient air quality standard (NAAQS) does not exist (i.e., excluding ozone, carbon monoxide, PM-10, sulfur dioxide, nitrogen dioxide, and lead) that may reasonably be anticipated to cause cancer, developmental effects, reproductive dysfunctions, neurological disorders, heritable gene mutations or other serious or irreversible chronic or acute health effects in humans.

**Delegation** - The act of conferring upon a state or local agency, the ability to implement and enforce federal standards and requirements. The EPA retains concurrent enforcement authority.

**Education** - Activities, materials, and tools prepared mainly to help the implementors understand the standard, locate sources, or otherwise implement the standard.

**Enabling Materials** - Activities, items, or tools prepared mainly for the industry being regulated.

**Implementation** - Putting into action, carrying out, and completing the activities that promote compliance with the MACT standard.

**Implementation Materials** - Activities, items, or tools prepared mainly for implementors with specific information about the standard and the source being regulated.

**Implementation Plan** - A plan of action designed to promote compliance with the MACT standard by identifying concrete measures, including preparation of implementation materials.

**Implementors** - The government agencies responsible for ensuring compliance with the MACT standard or its approved equivalent.

**MACT Partnership** - An agreement between the EPA and a region/state/local agency or tribal entity to share the responsibility of MACT standard development. EPA works with STAPPA, ALAPCO and others to identify opportunities for partnerships for source category specific regulations. The "Share-a-MACT" process is led by EPA with contribution from state and local agencies and industry. The "Adopt-a-MACT" process is led by a region, state or local agency or tribal entity with minimal contributions from EPA headquarters. EPA headquarters reviews, approves, and promulgates the standard.

**Maximum Achievable Control Technology (MACT) Standards** - Emissions limitations developed under section 112(d) of the Clean Air Act (National Emissions Standards for Hazardous Air Pollutants). The limitations are based on the best demonstrated control technology or practices in similar sources to be applied to major sources emitting one or more of the listed toxic pollutants. This term is sometimes incorrectly used as a colloquialism to refer to other technology-based emissions standards developed by the Emission Standards Division/OAQPS.

**Outreach** - Activities, materials, or tools prepared mainly to locate affected industries or to educate those industries and the general public.

**SBREFA Guidance Document** - A document to help small businesses understand the requirements of a standard. Such documents are required by the Small Business Regulatory Enforcement Fairness Act when a standard may have significant effects on small businesses. See Appendix J.

**Specific MACT Implementation Plan (SMIP)** - A specific MACT Implementation Plan that has been agreed upon by all involved parties, which clearly identifies tools, implementation materials, roles and responsibilities of implementors, and a schedule for the implementation of a MACT standard. Contains a Tool Development Agreement.

**Tool Development Agreement (TDA)** - A table of implementation materials potentially developed for each MACT standard with assignment of the lead group for each item and participants in the development of each item.

## 1.0 INTRODUCTION

### Section Summary

The purpose of this document is to present a strategy for activities that, if followed, should be helpful in ensuring that MACT standard emissions reductions are achieved. This strategy is not mandatory, but does represent the collective wisdom of many regulators and implementors as to activities that should be worthwhile. Many of the activities are those that EPA, states and local agencies have already been using successfully for some standards and should be successful for other standards as resources allow. This is a "living" document. That is, as more implementation experience is obtained, EPA will make appropriate revisions. Communication and coordination among the implementors is essential.

Section 112 of the Clean Air Act (CAA) has nineteen subsections [section 112(a) through section 112(s)] with requirements pertaining to protection of the public and the environment from adverse effects resulting from the use of and exposure to air toxics . The subsections include many specific requirements regarding federal, state, local, and tribal programs (e.g., section 112(l), which applies to development and approval of state air toxics programs and delegation of federal authorities; or section 112(r), which applies to accidental releases of air toxics).

Separate from the effort to prepare this document, the Office of Air Quality Planning and Standards (OAQPS) has developed a draft air toxics management model which addresses the interrelationships of these nineteen subsections and their requirements. The draft model incorporates setting goals, identifying necessary emission reductions, implementing emission reduction and pollution prevention plans, and evaluating results. Currently, OAQPS is in the process of developing the goals and performance measures. Other major efforts by OAQPS include integration of section 112 air toxics requirements with other CAA programs such as the Title V Operating Permit Program and the New Source Review/Prevention of Significant Deterioration Program (NSR/PSD).

The Air Toxics Implementation Strategy (ATIS) development team was originally formed to develop a comprehensive plan of activities that should be helpful for implementors to ensure that the emissions reductions from standards developed under section 112 are actually achieved. However, since the air toxics management model is still draft and the goals and performance measures are still under development, the team decided this document should focus on the implementation of Maximum Achievable Control Technology (MACT) standards, the cornerstone of the federal air toxics program. That is, two very high priorities for EPA are the development and implementation of MACT standards. Many of the elements in the strategy are intended to add administrative efficiencies and reduce duplicative efforts in the MACT implementation process. Some of the early tasks of the ATIS development team focused on developing checklists and other tools to ensure that implementation aspects are fully considered during the development of MACT standards (e.g., efficient and effective integration with Title V and other programs). However, those tools are not the focus of this document and thus, are not appended.

Rather, this document focuses on several issues related to MACT implementation, including the development of implementation plans, communication and coordination issues, and allocation of different implementation tasks to specific federal, state, local, tribal, and other entities. This document is available to all affected government entities and may serve as a template or model for how the various stakeholders may work together to effectively and efficiently implement MACT standards. Table 1-1 provides a general overview of different phases of MACT development and implementation and identifies the primary roles of the responsible entities during each phase. Figure 1-1 presents graphically the MACT implementation process.

Other important air toxics issues such as integration of MACT implementation with other air toxics programs (e.g., residual risk standards) and integration of air toxics programs with criteria pollutant programs are not addressed in this document, but rather will be discussed in a future document.

## 1.1 Purpose of this Document

The purpose of this document is to provide a strategy for successful implementation of MACT standards. This document provides helpful information for efficient and effective promotion of compliance with MACT standards or their approved equivalents, by helping implementors decide what should be done, who should do it, and when it should be done. This document was developed for implementors (government entities tasked with ensuring compliance with MACT standards); however, industry and the public may find some of the information useful as well. This document includes recommendations for how to prepare a Specific MACT Implementation Plan (SMIP) for a MACT standard. This document describes the elements of such plans and roles and responsibilities of the implementors. It also includes a systematic communication process for promoting an adequate understanding of the MACT standards and for coordinating implementation activities. This document is intended to assist implementors by outlining critical success factors and by identifying recommended materials and activities.

These recommendations are flexible. This document provides information for the implementors to identify appropriate implementation activities and ways to accomplish these activities. EPA anticipates that the implementors will consider the information presented in this document while they structure their strategy to meet their specific needs. For example, a relatively simple standard affecting few sources in only one state may require less effort in development of outreach brochures and other implementation tools than a complex standard with numerous, small, affected sources located in many states.

## 1.2 Organization of this Document

Section 2.0 of this document describes the roles and responsibilities of implementors and Section 3.0 briefly describes communications that need to occur systematically for implementation efforts to have the highest likelihood of success. Section 4.0 describes implementation elements that should be considered when developing a SMIP. Section 5.0 describes a method for determining which implementation elements are appropriate for a SMIP and describes the preparation of a Tool Development Agreement (TDA). Table and figures are found at the end of

the appropriate section to avoid interruptions in the text. Example interview questions are included (see Appendix A) to help in deciding which implementation materials and activities are appropriate for each MACT standard.

Reference materials and examples that implementors may find useful when developing SMIPs are included in the appendices of this document. For example, a SMIP for the Ethylene Oxide Commercial Sterilizers standard is included, as well as inspection checklists for dry cleaning and chromium electroplating facilities.

## 1.3 Strategy Review and Measuring Success

The strategy presented in this document was developed by the ATIS development team along with the managers of their respective organizations as participants, and others as informal contributors. This strategy is considered a "living document" and comments are welcome. In addition, information on air toxics implementation successes and example implementation tools that can be shared with others is especially welcome. EPA and STAPPA/ALAPCO strongly encourage state, local, and tribal entities to share their implementation tools and place them on the EPA/STAPPA/ALAPCO Unified Air Toxic Website (see Appendix D for further information about the website). Comments and information may be sent to the following address:

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Implementation of MACT standards is included in the EPA Annual Performance Plans and Annual Program Performance Reports, as required by the Government Performance and Results Act and as a priority in the Performance Partnership Agreements between EPA and the states. Mechanisms are being developed to measure and track implementation results. Also, EPA will evaluate the usefulness of this document, and update or revise it as needed. A critical success factor for implementation activities is that the affected sources and implementors understand the

rules, policies, and protocols they are required to implement, including the compliance requirements and when necessary, the appropriate enforcement response policies. Thus, the availability of tools to assist in gaining this understanding and in assuring compliance is an important part of this strategy. This document serves as one of the tools and as a reference to other tools that should assist the implementors in their efforts.

## Table 1-1. Primary Roles During MACT Development and Implementation

| Phase | Headquarters Role | Regional Office Role | State/Local/Tribal Role | Private Sector |
|---|---|---|---|---|
| Data Gathering | Form MACT development team<br><br>Determine data needs | Participate in MACT Partnerships and Work Groups | Participate in MACT Partnerships and Work Groups | Provide representative data |
| Proposal | Develop MACT<br><br>Help develop SMIP | Participate in MACT Partnerships and Work Groups<br><br>Review/Comment<br><br>Lead development of SMIP | Participate in MACT Partnerships and Work Groups<br><br>Review/Comment<br><br>Help develop SMIP<br><br>Plan outreach efforts | Review/Comment |
| Promulgation | Lead preparation of TDA<br><br>Complete development of MACT | Participate in preparation of TDA<br><br>Encourage delegation | Participate in preparation of TDA<br><br>Implement | Participate in preparation of TDA<br><br>Develop compliance plan |
| Compliance | Track implementation | Track implementation | Conduct outreach activities<br><br>Conduct compliance assistance activities<br><br>Ensure compliance | Submit initial notification<br><br>Comply |
| Continuous Compliance | Provide guidance on residual risk | Track compliance<br><br>Enforce, as needed | Track compliance<br><br>Inspect<br><br>Enforce, as needed | Continuously comply<br><br>Keep records, monitor, and certify annually |

SMIP = Specific MACT Implementation Plan
TDA = Tool Development Agreement


**Figure 1-1. A Roadmap to Successful MACT Implementation**

## 2.0 ROLES AND RESPONSIBILITIES OF IMPLEMENTORS

### Section Summary

This section identifies key players in the implementation process and defines their roles and responsibilities.

This section provides recommended general roles and responsibilities of implementors in the MACT implementation process. It is important for the implementors to communicate clearly with each other and agree to specific roles and responsibilities for each MACT standard. Regardless of who is ultimately responsible for each implementation task, it is important to thoroughly identify the tasks to be completed, who will complete them, and the schedule for completing them. The Office of Air Quality Planning and Standards (OAQPS) Program Review Group (PRG) will take the lead in ensuring that a timely and systematic process is established. Also during MACT development, PRG will conduct an interview with the MACT development team lead and representative implementors using the list of questions presented in Appendix A or similar questions to make a preliminary determination of expected implementation needs.

The details of this section are primarily contained in Tables 2-1 through 2-4, which identify and assign the numerous roles and responsibilities recommended to implement a MACT standard. Although the implementors may agree to different roles and responsibilities for a specific MACT, the rationale behind these recommended roles and responsibilities is explained in this section.

Successful implementation of MACT standards is a large undertaking and requires significant time and resources. First, there should be well-defined emission standards that achieve the requirements of the CAA, are consistent with EPA goals, and are designed to be implemented as efficiently and effectively as possible. All of the stakeholders, but especially the regional offices and state, local, and tribal entities, should consider implementation aspects while the standards are being developed. Ideally, there will be agreement among all of the stakeholders on the standards and implementation aspects, and there will be a good faith effort by industry to comply. To

bridge the gap between MACT standard development and industry-wide compliance, implementors (in particular EPA [OAQPS, Office of Enforcement and Compliance Assurance (OECA), Regional Offices], and state, local, and tribal entities) should complete three broad-based tasks:

- Identify the affected regulated sources;
- Inform the affected regulated sources so that they may determine which requirements apply to them, and understand how to comply with the requirements; and
- Monitor and assure compliance.

The ultimate responsibility for completing these three tasks is generally delegated to the state, local, or tribal entity. Considering the burden on the implementors and the similarity of their needs, it is prudent for them to share the development of implementation tools and other information, where possible. The primary groups typically responsible for MACT standard implementation support are:

- Emission Standards Division (ESD)/OAQPS/EPA;
- Information Transfer and Program Integration Division (ITPID)/OAQPS/EPA;
- Emissions Monitoring and Analysis Division (EMAD)/OAQPS/EPA;
- EPA Regional Offices;
- Office of Regulatory Enforcement (ORE)/OECA/EPA;
- Office of Compliance (OC)/OECA/EPA; and
- Air Office of state, local, and tribal entities (including both environmental agencies and small business assistance offices).

To help the permitting authorities ensure that the three broad-based implementation tasks mentioned above are successfully completed, the tasks are further subdivided into well-defined subtasks that are assigned to specific parties. These subtasks and assignments are detailed in Table 2-1, OAQPS Roles and Responsibilities; Table 2-2, OECA Roles and Responsibilities;

Table 2-3, Regional Office Roles and Responsibilities; and Table 2-4, State and Local Offices Roles and Responsibilities. The roles and responsibilities detailed in Tables 2-1 through 2-4 focus primarily on activities that take place during or soon after MACT standard development.

Note that while Tables 2-1 through 2-4 are detailed and explicit, they are intended to be flexible. That is, the implementors should carefully consider all of the recommendations in this MACT implementation strategy and agree on changes as appropriate to fit their specific circumstances. Nonetheless, these tables provide an initial plan of action that identifies subtasks and assignments currently envisioned for implementation of a MACT standard. Implementor experiences have demonstrated that a detailed initial plan, ongoing review of execution of the plan, and feedback mechanisms for adjustments to the plan are prudent for effective implementation.

## Table 2-1. OAQPS Roles And Responsibilities

| Activities | ITPID | ESD | EMAD | AQSSD | PRRMS |
|---|---|---|---|---|---|
| Develop MACT | Provides input on:<br>- Integration with other programs, as needed<br>- Potential to Emit<br>- § 112(l) issues | Develops MACT's that achieve the requirements of the CAA, are consistent with EPA goals, and are designed to be implemented as effectively and efficiently as possible | Provides input on test methods and monitoring | Reviews MACT data for coordination with future residual risk standards such as Great Waters Programs, Urban Air Toxics Strategy, etc. | Promotes Regional office and state participation through memorandum of agreement and performance partnerships |
| Prepare SBREFA Compliance Assistance Guides and other small business outreach materials for area source standards and small businesses | Provides input and coordinates with other Small Business assistance efforts and assists with distribution of materials | Develops documents with input from OECA on compliance assistance activities | Provides input, as necessary (e.g., source testing and monitoring) | Provides input, as necessary (e.g., health and environmental effects) | Provides input, as necessary (e.g., planning and resources) |
| Prepare a Specific MACT Implementation Plan (SMIP) for each standard that includes:<br>- How to identify sources<br>- Summary of requirements<br>- Applicability tables<br>- Compliance checklist<br>- Permit requirements | Leads team effort to develop SMIP according to MACT Implementation strategy that clarifies roles and lays out process for setting priorities and systematic communication | Provides team member<br><br>Ensures technical accuracy of SMIP | Provides team member<br><br>Provides input on source test methods and monitoring | Provides team member | Provides team member |
| Develop training materials and classes on newly promulgated standards | Provides vehicle for training and develops course materials | Provides technical experts to lecture and review materials | Provides technical experts to lecture and review materials relating to source testing and monitoring | Provides scientific experts to lecture and review materials relating to health and environmental effects | Provides development plan, expertise, and Regional office coordination (e.g., Desk Officers) |
| Issue specific implementation guidance where needed (e.g., section 111(d)/129 State Plans for Municipal Waste Combustors) | Prepares guidance (documents or policy memoranda) | Provides technical experts to participate in development of supporting guidance | Provides technical experts as appropriate | Provides experts to answer health and environmental effects questions, when needed | Coordinates with ITPID on policy and guidance availability<br><br>Desk Officer assures communication with the Regional office |

AQSSD = Air Quality Strategies and Standards Division
EMAD = Emissions, Monitoring and Analysis Division
ESD = Emission Standards Division
ITPID = Information Transfer and Program Integration Division
OECA = Office of Enforcement and Compliance Assurance
PRRMS = Planning, Resources, and Regional Management Staff
SBREFA = Small Business Regulatory Enforcement Fairness Act

## Table 2-1. OAQPS Roles And Responsibilities (continued)

| Activities | ITPID | ESD | EMAD | AQSSD | PRRMS |
|---|---|---|---|---|---|
| Coordinate efforts with other implementing offices such as OECA, Regional offices, states, locals, and tribes | Identifies obstacles to implementation, takes steps to overcome obstacles, facilitates conference calls, workshops, visits, etc. | Participates as needed, answers questions on technical and policy aspects of rules | Participates as needed, provides technical expertise as appropriate | Participates as needed, provides technical expertise, as appropriate | Participates as needed, provides input on Regional office, state, local and tribal needs |
| Report on National Progress in meeting goals | Prepares reports and provides system operator for information management system<br><br>Helps develop goals, review progress, refine goals, and overcome obstacles | Establishes goals for MACT standards and performance measures<br>- determines what reports are needed<br>- receives reports<br><br>Leads development of goals and priorities, reviews progress, refines goals, and overcomes obstacles. Ensures coordination of priorities among program offices, Regions, OECA and states, local and tribal entities. | Helps develop goals, review progress, refine goals, and overcome obstacles | Helps develop goals, review progress, refine goals, and overcome obstacles | Helps develop information systems and encourages participation of regions, states, local and tribal entities<br><br>Helps develop goals, review progress, refine goals, and overcome obstacles |
| Develop and maintain communication networks | Provides and maintains Internet website and coordinates responses as needed | Provides information on MACT for website<br><br>Responds to questions | Provides information for website<br><br>Responds to questions | Provides information for website<br><br>Responds to questions | Provides information for Internet websites in coordination with ITPID |
| Prepare enabling documents, and implementation documents and tools | Coordinates the preparation of implementation documents and tools<br><br>Reviews for "Readability" | Develops enabling documents for industry, as necessary<br><br>Provides input to ITPID for implementation documents and tools | Provides input on source testing and monitoring as appropriate | Provides input on health and environmental effects as appropriate | Provides input on readability and relationship to overall planning and management |

AQSSD = Air Quality Strategies and Standards Division
EMAD = Emissions, Monitoring and Analysis Division
ESD = Emission Standards Division
ITPID = Information Transfer and Program Integration Division
OECA = Office of Enforcement and Compliance Assurance
PRRMS = Planning, Resources, and Regional Management Staff
SBREFA = Small Business Regulatory Enforcement Fairness Act

## Table 2-1. OAQPS Roles And Responsibilities (continued)

| Activities | ITPID | ESD | EMAD | AQSSD | PRRMS |
|---|---|---|---|---|---|
| Ensure MACT Delegations and approval of state rules and programs under Section 112(l) | Coordinates Program and Rule Equivalency reviews with other Divisions, OECA, and Regional offices | Provides expertise on MACT rule specifics and equivalency | Provides expertise on test methods and monitoring as needed | Provides expertise as needed | Coordinates with Regional offices |
| Participate in monthly Air Toxics Implementation calls with EPA Regions to exchange relevant experiences, to help other implementors, and to resolve issues | Coordinates EPA participation in monthly calls | Participates in monthly calls as needed | Participates in monthly calls as needed | Participates in monthly calls as needed | Participates in monthly calls as needed |
| Provide guidance on Title V permitting and other means to ensure emission reductions | Provides guidance on permitting and other means to ensure emissions reductions | Provides expertise on MACT rule specifics and flexibility | Provides expertise on test methods and monitoring | Provides expertise as needed | Coordinates with Regional offices |

AQSSD = Air Quality Strategies and Standards Division
EMAD = Emissions, Monitoring and Analysis Division
ESD = Emission Standards Division
ITPID = Information Transfer and Program Integration Division
OECA = Office of Enforcement and Compliance Assurance
PRRMS = Planning, Resources, and Regional Management Staff
SBREFA = Small Business Regulatory Enforcement Fairness Act

## Table 2-2. OECA Roles And Responsibilities

| Office Of Regulatory Enforcement (ORE) | Office Of Compliance (OC) | National Enforcement Training Institute (NETI) |
|---|---|---|
| Participates in development of goals, priorities, and tracking of results. | Participates in development of goals, priorities, and tracking of results. | Participates in development of goals, priorities, and tracking of results. |
| Develops enforcement response policy for toxics, including penalty policies, as needed | | |
| Provides enforcement assistance to Regional offices | Provides compliance assistance to Regional offices | Provides enforcement training |
| | Reviews and provides input on SBREFA guides and enabling documents, as appropriate<br><br>Provides compliance checklists and implementation manuals for inspectors | Conducts inspector training |
| Answers questions from Regional office on applicability determinations | Answers questions from Regional offices on applicability determinations (coordinates with OAQPS and OGC as appropriate). Compiles answers on Applicability Determination Index (ADI) on website | |
| Supports development of section 112 rules, including MACT standards to ensure enforceability | Supports development of MACT standards to ensure enforceability | |
| Participates in regular calls and meetings with OAQPS and Regional offices | Participates in regular calls and meetings with OAQPS and Regional offices | |
| | Tracks compliance in conjunction with Regional offices, states, local and tribal entities | |

OAQPS = Office of Air Quality Planning and Standards
OGC = Office of General Counsel
SBREFA = Small Business Regulatory Enforcement Fairness Act

## Table 2-3. Regional Office Roles And Responsibilities

| Activities | Programs Branch | Compliance Branch |
|---|---|---|
| Processes 112(l) submittals | Processes submittals | |
| Delegates MACT standards | Encourages delegation<br>Completes delegation<br>Tracks delegation | |
| Conducts outreach to states and sources | Conducts outreach as needed to states and sources | Conducts outreach to states and sources as needed |
| Provides compliance assistance to states and sources | | Provides compliance assistance to states and sources as needed |
| Ensures that agencies track and report compliance | | Assists agencies with tracking and reporting compliance |
| Conducts inspections and takes enforcement actions | | Inspects and enforces as necessary |
| Implements standards and requirements prior to delegation and where states and tribes do not take delegation | Implements as necessary | Implements as necessary |
| Makes 112(g) determinations when necessary | Implements 112(g) as necessary | Implements 112(g) as necessary |
| Reviews state plans under section 112(d) and/or section 129 | Reviews plans as necessary | Reviews plans as necessary |
| Works with OAQPS, OECA and states with program goals | Assists OAQPS, OECA, and states with goals as necessary | Assists OAQPS, OECA, and states with goals as necessary |
| Reviews Title V permits and other means to ensure MACT's are implemented | Reviews permits and other means as necessary | Reviews permits and other means as necessary |
| Reports to Headquarters on status of program implementation | Provides Headquarters reports on program implementation | |
| Provides guidance and responds to technical and policy questions from states, local, and tribal entities on toxics-related issues | Provides assistance as necessary | Provides assistance as necessary |
| Provides assistance to states on applicability determinations | Coordinates applicability determinations with OECA, OAQPS, and OGC | Provides input to Programs Branch |
| Submits determinations in appropriate format to Applicability Determination Index | Supplies Applicability Determination Index information as necessary | Supplies Applicability Determination Index information as necessary |
| Assists Headquarters in rule and guidance document development, including Adopt-A-MACT | Assists Headquarters as necessary with rule and guidance document development | Assist Headquarters as necessary with rule and guidance development |
| Participates in monthly Air Toxics calls with OAQPS, OECA, other Regional offices, and state, local, and tribal entities | Participates in monthly air toxics calls | Participates in monthly Air Toxics calls |

* The apportioning of the activities within the regional office in this chart is an example that will vary according to the organizational structure of the specific entities.

## Table 2-4. State/Local/Tribal Roles And Responsibilities

| Activities | Air Toxics Section | Permits Section | Small Business Assistance Program | Enforcement/Surveillance Section |
|---|---|---|---|---|
| Participate in MACT and other Section 112 program development activities | Provides expertise and real-world experiences<br><br>Participates in possible pilot testing of specific proposed MACT's at Work Group closure<br><br>Participates in Presumptive MACT and Adopt-a-MACT programs | Provides expertise and real-world experiences | Provides expertise and real-world experiences | Provides expertise and real-world experiences |
| Review schedule of upcoming regulations and requirements and plan work load | Plans work load | Plans work load | Plans work load | Plans work load |
| Review regulations, fact sheets, implementation guidance, and other relevant information on the STAPPA/ALAPCO/EPA Unified Air Toxics Website. | Leads state activities and efforts and requests input from other sections as needed | Provides input to Air Toxics Section as needed | Provides input to Air Toxics Section as needed | Provides input to Air Toxics Section as needed |
| Delegate authority | Determines if delegation will be requested<br><br>Coordinates with Regional office<br><br>Requests delegation<br>- delegation agreement<br>- state rulemaking | Coordinates with Air Toxics Section | | |
| Locate and identify sources | Uses procedures in Source Identification Cookbook to find sources<br><br>Coordinates with Regional office to share information | Provides helpful information to Air Toxics Section | Assists in identifying sources | Provides assistance when necessary |

NESHAP = National Emission Standard for Hazardous Air Pollutant
OECA = Office of Enforcement and Compliance Assurance
STAPPA/ALAPCO = State and Territorial Air Pollution Program Administrators/Association of Local Air Pollution Control Officials

## Table 2-4. State/Local/Tribal Roles And Responsibilities (continued)

| Activities | Air Toxics Section | Permits Section | Small Business Assistance Program | Enforcement/Surveillance Section |
|---|---|---|---|---|
| Conduct outreach and training for affected sources, as well as other compliance assistance activities | After sources are identified,<br>- distributes EPA guidance<br>- coordinates with Small Business Assistance Program<br>- contacts sources<br>- surveys sources | Provides input to Air Toxics Section | Sets up and provides input and support in outreach and training for small businesses<br><br>Visits sites | Provides assistance when necessary |
| Make applicability determinations such as Potential to Emit determinations | Same system as Part 61 NESHAP (i.e., coordinates with other sections and Regional office per memorandum of agreement)<br><br>Inputs information into the Applicability Determination Index on website<br><br>Develops compliance tracking system<br><br>Coordinates with OECA and regional office | Provides input to Air Toxics Section | Provides assistance when necessary | |
| Make compliance determinations and regulatory interpretations | Coordinates with Enforcement Section and Regional office<br><br>Tracks determination and provides information to Regional offices as necessary | Provides input as necessary | | Coordinates with Air Toxics Section and Regional office |

NESHAP = National Emission Standard for Hazardous Air Pollutant
OECA = Office of Enforcement and Compliance Assurance
STAPPA/ALAPCO = State and Territorial Air Pollution Program Administrators/Association of Local Air Pollution Control Officials

## Table 2-4. State/Local/Tribal Roles And Responsibilities (continued)

| Activities | Air Toxics Section | Permits Section | Small Business Assistance Program | Enforcement/Surveillance Section |
|---|---|---|---|---|
| Permit sources | Provides training and information and answers questions<br><br>Reviews permit prior to approval | Writes permit | Provides assistance when necessary | Reviews permit prior to approval |
| Make Section 112(g) determinations | Develops state program and implements it accordingly | Coordinates with Air Toxics Section | Coordinates with Air Toxics Section | Coordinates with Air Toxics Section |
| Conduct compliance inspections | Provides mechanism to include sources in inspection schedule<br><br>Provides training/assistance when necessary<br><br>Reviews compliance reports | | Coordinates with EPA Federal Small Business Assistance Program contacts to provide compliance assistance | Conducts source inspections, writes inspection report, and recommends enforcement action |
| Take enforcement actions where appropriate | Submits, follows through, and tracks enforcement requests to Enforcement/ Surveillance Section | | Coordinates with Federal Small Business Assistance Program<br><br>Has no involvement in enforcement activities<br><br>May give 90 days to 1 year "corrective period" | Coordinates with Air Toxics Section on recommended enforcement action<br><br>Takes enforcement action |

NESHAP = National Emission Standard for Hazardous Air Pollutant
OECA = Office of Enforcement and Compliance Assurance
STAPPA/ALAPCO = State and Territorial Air Pollution Program Administrators/Association of Local Air Pollution Control Officials

## Table 2-4. State/Local/Tribal Roles And Responsibilities (continued)

| Activities | Air Toxics Section | Permits Section | Small Business Assistance Program | Enforcement/Surveillance Section |
|---|---|---|---|---|
| Review permit applications, plans, and reports<br><br>Evaluate testing and monitoring results, and compliance extension waivers<br><br>Review initial notifications, implementation plans, and periodic reports | Assigns MACT standards to staff<br><br>Reviews and tracks requests and reports<br><br>Requests additional information as needed<br><br>Recommends enforcement as needed | Reviews applications and issues construction/ reconstruction permits | Provides input when necessary | Provides assistance in contacting source or sharing knowledge of standard as needed |
| Provide assistance to small businesses | Coordinates with Small Business Assistance Program | Provides input as needed | Provides assistance as needed | Provides assistance when necessary |
| Report to EPA Regional office on progress of implementing program and identify obstacles | Discusses with EPA obstacles requiring attention prior to submittal of report<br><br>Prepares report<br><br>Coordinates with other sections | Provides input to Air Toxics Section as needed | Provides input to Air Toxics Section as needed | Provides input to Air Toxics Section as needed |
| Participate in monthly Air Toxics Implementation calls with Regional office and monthly calls with STAPPA/ALAPCO to exchange relevant experiences and to help implementors resolve issues | Coordinates and participates in monthly calls | Participates in monthly calls as needed | Participates in monthly calls as needed | Participates in monthly calls as needed |

NESHAP = National Emission Standard for Hazardous Air Pollutant
OECA = Office of Enforcement and Compliance Assurance
STAPPA/ALAPCO = State and Territorial Air Pollution Program Administrators/Association of Local Air Pollution Control Officials

## Table 2-4. State/Local/Tribal Roles And Responsibilities (continued)

| Activities | Air Toxics Section | Permits Section | Small Business Assistance Program | Enforcement/Surveillance Section |
|---|---|---|---|---|
| Track compliance and reports to databases | Provides input to the Enforcement/Surveillance Section as needed | Provides input to the Enforcement/Surveillance Section as needed | Provides input to the Enforcement/Surveillance Section as needed | Leads state efforts to track compliance |

[a] All of the activities presented here should be included in the roles of the state, local, and tribal entity office. The apportioning of the activities within the state, local, or tribal offices in this chart is an example that will vary according to the organizational structure of the specific entities.



NESHAP = National Emission Standard for Hazardous Air Pollutant
OECA = Office of Enforcement and Compliance Assurance
STAPPA/ALAPCO = State and Territorial Air Pollution Program Administrators/Association of Local Air Pollution Control Officials

## 3.0 SYSTEMATIC COMMUNICATION

### Section Summary

This section discusses the protocol for successful MACT implementation strategy communications, which include PRG's roles, including the lead for coordinating implementation tool development activities, how information should flow among stakeholders, the process to resolve issues, the process to schedule and track progress, and the Regional Air Toxics Coordinator's roles after promulgation.

This section describes the recommended Systematic Communication protocols necessary for successful completion of the MACT implementation strategy. These recommended protocols serve to ensure that stakeholders transfer critical information in a complete and timely manner.

The need for systematic protocols is underscored by several factors:

- The Air Toxics Program is broad-based, affecting numerous stakeholders in the public, industrial, and regulatory sectors.
- The large number and variety of stakeholders makes communication inherently difficult to manage; systematic communication will ensure the transfer of critical information that might otherwise be lost via informal communication.
- The MACT standards will be written and implemented over several years; the lessons learned during the development and implementation of early MACT standards will facilitate the development and implementation of later MACT standards.

The following subsections describe the elements of the communication system and provide suggestions for executing and monitoring individual information management tasks. Prior to promulgation, the Program Review Group (PRG) has the primary responsibility for planning and coordinating the communications process. They should encourage open and timely communication among the responsible parties so that the implementors and their managers can reach consensus on implementation activities.

## 3.1 Information Exchange

Figure 3-1 schematically illustrates the pathways of information exchange in managing MACT implementation issues. As shown in the figure, there are numerous participants in the communication process, including EPA, regulated sources, state and local agencies, tribal entities, and the public. Information flows to and from each of these entities throughout the implementation process through such means as internal and external EPA documents, MACT rule development dockets, the Federal Register, electronic bulletin board systems, electronic mail, internet websites, technical assistance calls, public meetings, and live and videotaped workshops.

While Figure 3-1 emphasizes that the information flows to and from many stakeholders, Figure 3-2 shows what information is exchanged. Some of the items shown in Figure 3-2 (such as monthly meetings of OAQPS Division Directors) are associated with the ongoing overall management of air toxics programs, while other items (such as training and outreach) may be associated with a specific MACT implementation effort. Regardless of whether the items shown in Figure 3-2 are considered part of the overall management and communication system or part of an individual MACT implementation effort, successful implementation rests on coordination of these efforts. The EPA Regional Air Toxics Coordinators have agreed to serve as a team to ensure good communication and to discuss and resolve issues as necessary among OAQPS, OECA, OGC, regional offices and the state/local/tribal entities.

The EPA/STAPPA/ALAPCO Unified Air Toxics Website is an invaluable means for information exchange. It provides air toxic pollution information in a centralized location on the internet, and is a source of information for the general public, federal, state and local governments, and sources. The housing of information in an easily accessible, centralized location greatly encourages sharing information in order to reduce duplication of effort. The Unified Air Toxics Website contains six different areas of information (Basic Facts, EPA Rules and Implementation, Pollutants and Sources, Technical Resources, EPA Programs, and State and Local Agency Programs) that are described in detail in Appendix D. All implementors should continually review the information on the website for possible applications to their planned tasks

and should make their own implementation tools available to others in order to maximize efficiency and effectiveness.

## 3.2 Questions and Reaching Resolution

Before promulgation of a standard, ESD usually has the primary responsibility for developing the standard, which includes responsibility for integrating issues related to Title V, NSR/PSD, compliance and enforcement, etc. Upon agreement between ESD and PRG, PRG will have the lead in coordinating the tool development efforts among the implementors for specific MACT standards with the highest priority implementation needs.

After promulgation, the Regional Air Toxic Coordinators coordinate implementation efforts, including the management of technical and policy questions from states/local/tribal entities, and discussion with the MACT development teams leads and/or implementation teams. It is expected that questions or issues may arise throughout the MACT implementation process. These issues should be resolved at the lowest level possible, (e.g., among the active implementors or the Regional Air Toxics Coordinators) but to the degree that they cannot be resolved at one level, they should be elevated as quickly as possible to the level at which they can be resolved.

Industry should direct their technical and policy questions to state and local agencies. Most questions should be answered by the state and local agencies by reading the MACT standard, enabling documents, and implementation documents. To the degree that additional information or guidance is needed, the state and local agencies may in turn direct their questions to EPA regional offices. The EPA regional office personnel should coordinate these responses with their Regional Air Toxic Coordinators. The Regional Air Toxic Coordinators should coordinate with the Regional Air Toxic Coordinator's Team and subsequently to the MACT development team lead as necessary. OECA provides assistance to the Regional Air Toxic Coordinators, the regional offices, and state and local agencies for applicability determinations, inspection coordination, and compliance support, when necessary.

This post-promulgation communication system is derived from the principle that questions should be answered by the authorities closest to the affected parties, that is, those that are most likely to know the details of the specific situation, including state and local rules and policies that may be relevant. The resolution process should consider the communication system described in this document to ensure that the roles and responsibilities of the implementors are executed (see Tables 2-1 through 2-4). EPA expects most questions to be answered at the local, state, tribal, or regional office levels. This process is shown graphically in Figure 3-4. If necessary, the Air Toxics Task Force (key managers in OAQPS, OECA, OGC, regional offices, and state/local/tribal entities) can assist in resolving issues across the stakeholder's offices and has agreed to meet on an as-needed basis. Prior to standard promulgation, OAQPS has the lead responsibility for ensuring that unresolved issues are presented to the Air Toxics Task Force, when necessary. This would be the responsibility of the Regional Air Toxic Coordinators after standard promulgation.

## 3.3 Scheduling

Timeliness is critical in the systematic communication process. Implementation activities should begin prior to promulgation and continue through compliance deadlines set forth in the standard. The earlier the process begins, the more likely that necessary elements will occur. For example, ITPID and ESD met to consider implementation aspects of the Medical Waste Incinerator Emission Guidelines over one year prior to promulgation and the Implementation Team kickoff meeting was six months prior to promulgation.

Figure 3-3, Example MACT Standard Implementation Timeline, provides a generic schedule for executing education, source population identification, compliance assurance, and enforcement activities. The timeline in the figure begins with the effective date for a MACT standard and continues through five "periods" marked by initial notification, substantive compliance dates, performance tests, notification of compliance status, and compliance and continuing periodic reports. This model timeline serves as an example and should be revised as appropriate to meet specific implementation needs.

## 3.4 Tracking

Tracking activities and progress is another critical issue in the systematic communication process. PRG/ITPID will maintain an internal database that tracks their SMIP subtask commitments and the preparation of materials (preparers and reviewers). ITPID has developed and will maintain the EPA/STAPPA/ALAPCO Unified Air Toxics Website as a vehicle for many implementors to provide information about their activities and products. The Planning, Resources, and Regional Management Staff has developed MACTRAX (see Appendix L) to be a simple, easy-to-use system for states and regions to track their overall status on implementation (i.e., delegations of MACT standards, source notifications received, and controls installed and operating). Also, over the next few years, the AIRS Facility Subsystem (AFS) will be re-engineered and will be an easy-to-use tool for EPA and states to track compliance and emissions and prepare reports.

As implementation efforts are completed and individual sources come into compliance with a specific MACT standard, the Regional Air Toxic Coordinators should identify follow-up action items, as necessary. The Regional Air Toxic Coordinators should also provide feedback to the MACT implementors in order to enhance the development of implementation materials and improve the implementation process for other standards not yet completed or fully implemented.

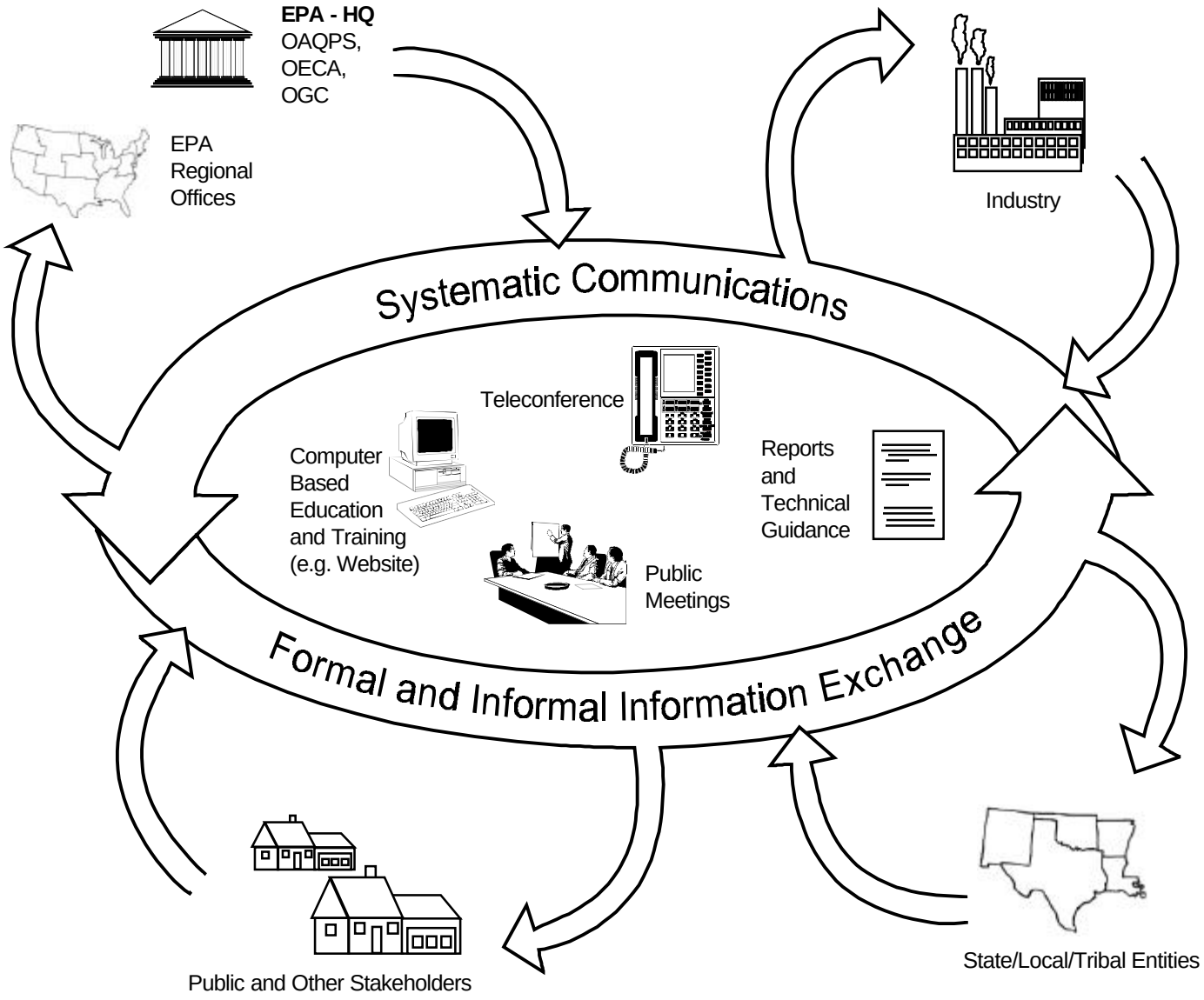



**Figure 3-1. Many Opportunities for Information Exchange**

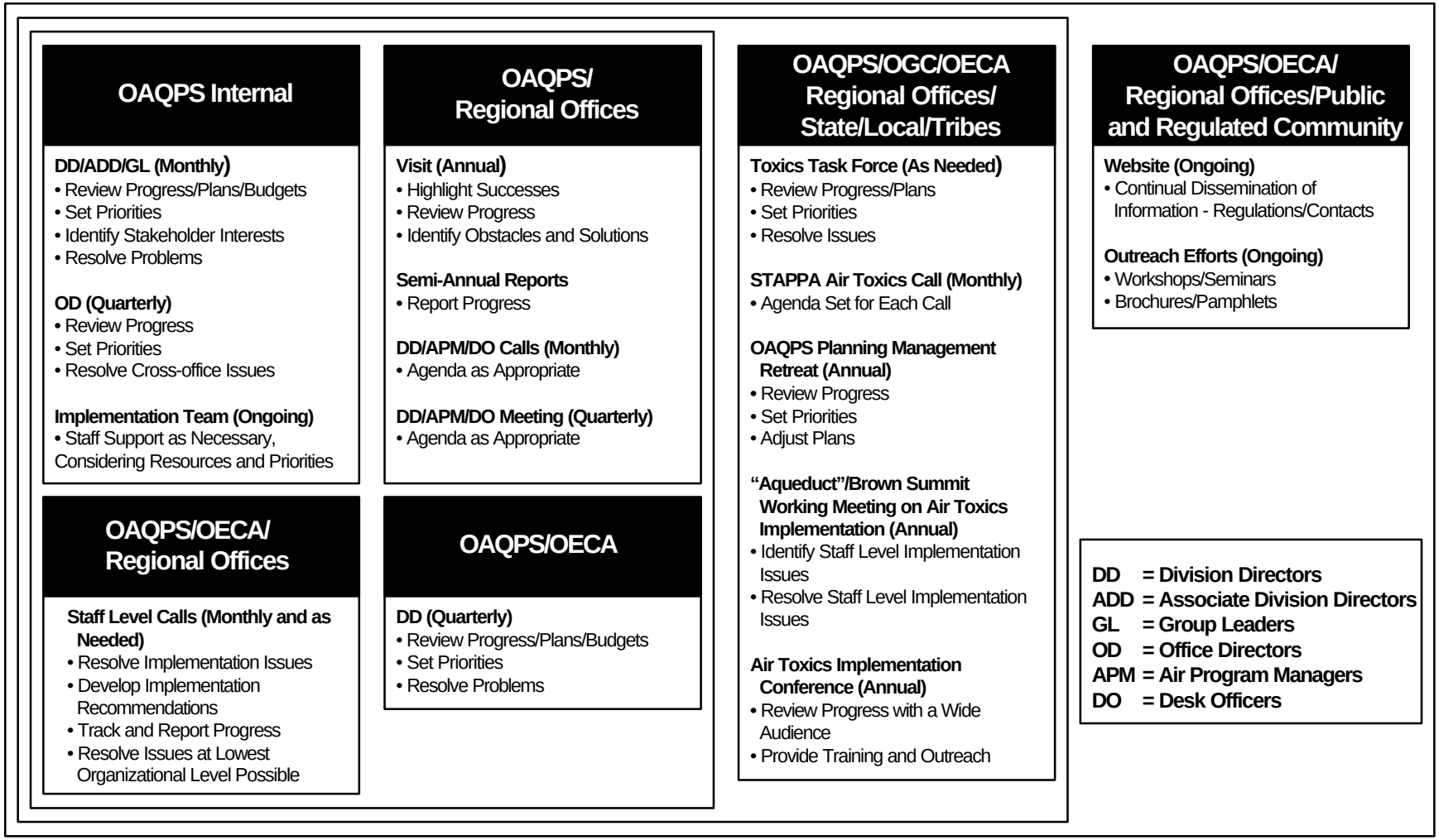
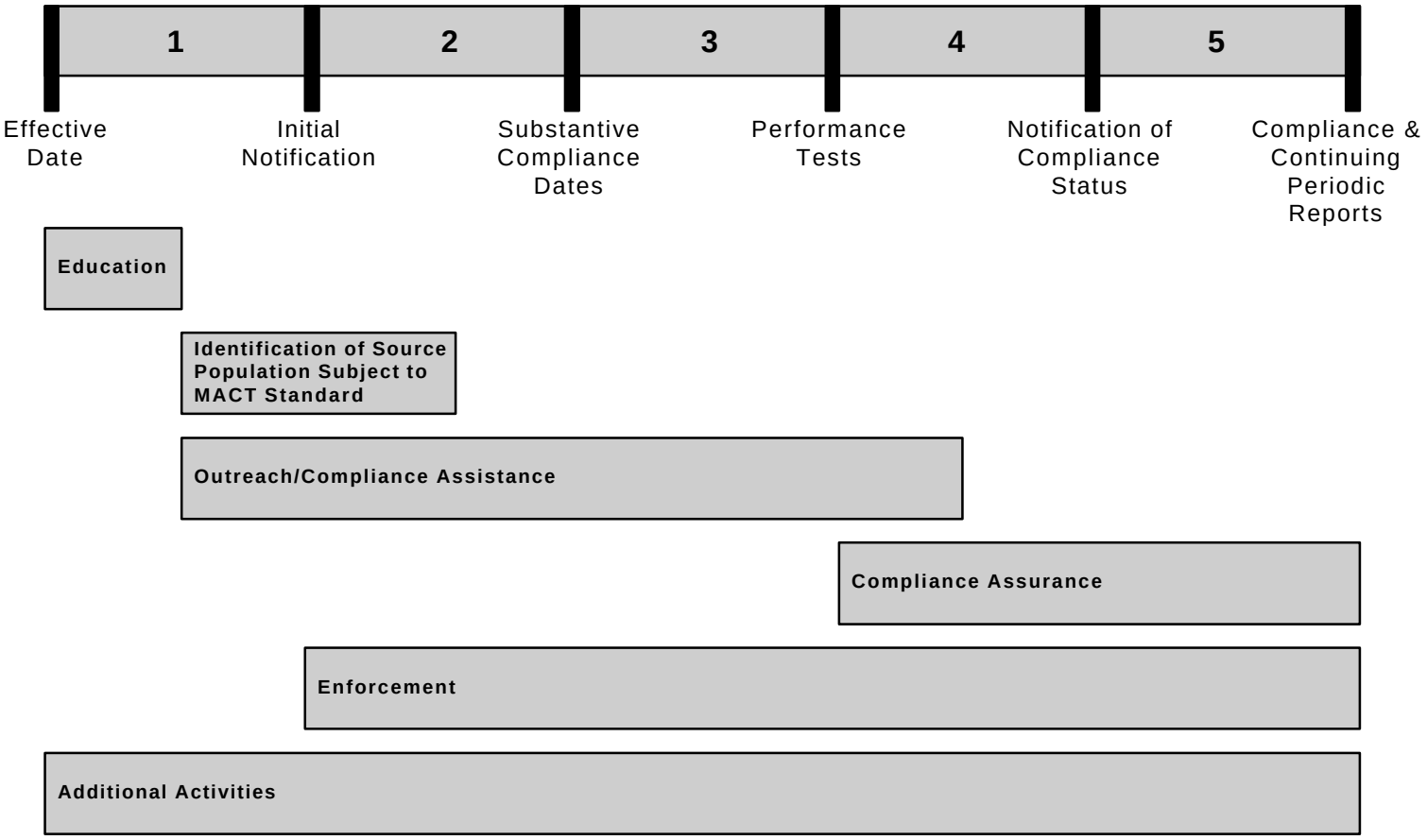



**Figure 3-2. Communication Agenda**




Source: Model Implementation Plan for MACT Standards
Draft No. 5 - March 7, 1997

**Figure 3-3. Example MACT Standard Implementation Timeline**

For existing sources, Period 1 is usually 120 days, and for new sources, Period 1 is usually 120 days from startup; however, an individual standard may specify a much longer timeframe.

- For existing sources Period 2 may be up to three years, but new sources generally must comply at startup. In other words, new sources usually do not have a Period 2.

- Period 3 is usually 180 days from the compliance date.

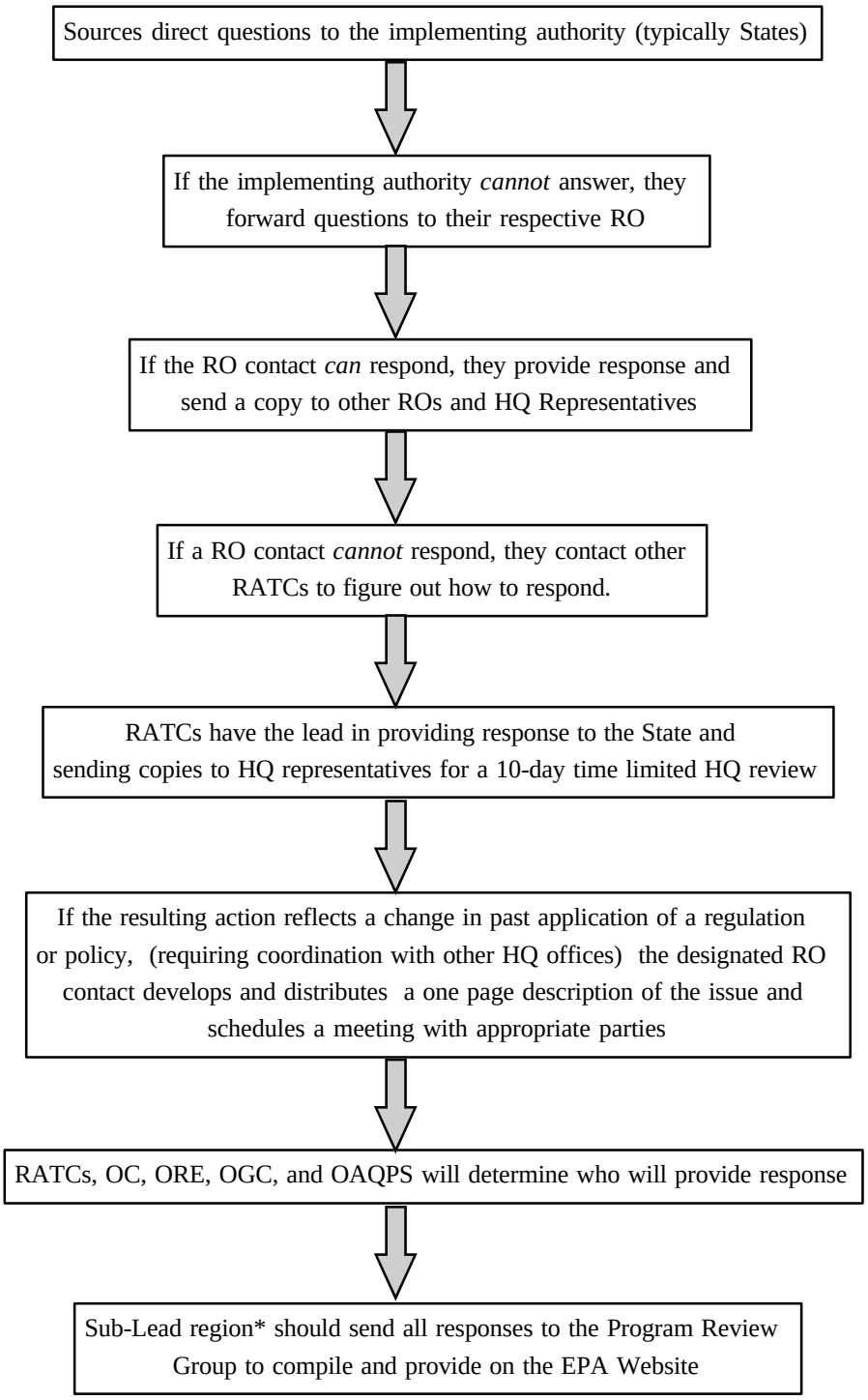
- Period 4 is usually 60 days.

- Period 5, measured as the time before the first periodic report is due, may be three, six, or twelve months, and subsequent reporting periods may be adjustable depending upon the standard.

- Also note that the entries for each phase indicate a potential duration; it is always advisable to execute the phases as expeditiously as possible. For example, the source population identification phase may extend past the initial notification date as these notifications may identify more sources, but the much of the work for this phase should be completed well before this date.



**Figure 3-3. Example MACT Standard Implementation Timeline (Continued)**




* Region IV is currently the sub-lead region for air toxics.
RO = Regional Office
HQ = Headquarters
RATC = Regional Air Toxics Coordinator
OC = Office of Compliance
ORE = Office of Regulatory Enforcement
OGC = Office of General Counsel
OAQPS = Office of Air Quality Planning and Standards

**Figure 3-4. Implementation Issue Resolution Process**

## 4.0 ELEMENTS OF A SUCCESSFUL IMPLEMENTATION STRATEGY

### Section Summary

Considerations for a successful strategy such as education, source population identification, outreach, small business issues, compliance assurance, enforcement, reference materials, available resources, and permitting issues are discussed.

The elements recommended for consideration and inclusion in any implementation effort are described in this section. Examples of how the elements are actually used in a Specific MACT Implementation Plan (SMIP) are presented in Section 5.0. This section specifically describes education, source population identification, outreach, small business needs, compliance assurance, enforcement, and how these elements are critical considerations in any strategy. These elements are described in more detail in the following paragraphs.

### 4.1 Education

For purposes of this strategy document, education refers to educating the implementors rather than educating the affected sources and the public, which is part of outreach. However, for many rules, some of the sources of information and activities described below may serve the goals of both education and outreach.

An important source of information is the SMIP which is prepared prior to promulgation of each MACT (see Section 5.0). The SMIP will provide a summary of the rule and an action plan for implementing the specific standard through all phases of implementation from education through enforcement. The SMIP, written for the implementors, would propose specific procedures for implementation associated with "trigger" dates within the standard such as notification dates, compliance dates, reporting intervals, and stack test dates.

The SMIP should be targeted for implementors, and should be as user-friendly as possible, avoiding regulatory language in favor of more common language where possible. A good example, the draft implementation plan for the Ethylene Oxide Commercial Sterilization Facilities MACT standard, is included in this document as Appendix F. The materials in the SMIP should use standard policies and procedures as much as possible and highlight significant differences or issues. This is important because the state agencies, permit writers, inspectors, and other staff have resource limitations. Materials in the SMIP do not replace the rule; if there are any legal issues, the rule takes precedence. However, the rule should not be solely relied on because of the need to quickly and efficiently transfer the needed information.

Even though the plan will provide a useful written summary for an implementing agency, some training may also be necessary. EPA's traditional training courses for MACT standards, primarily teleconference satellite courses, are excellent in fulfilling this need. EPA plans to arrange these courses at optimum times for those standards that have the greatest need.

The implementors will be asked many questions that may be answered based on the educational materials and training discussed above. EPA will also provide assistance to the implementor for specific questions that are not covered in the materials discussed above. To facilitate the process, the regional offices will identify a contact person for each standard or a central contact who can then transfer the specific question to the appropriate regional office person. In turn, appropriate OECA, OGC, and OAQPS contacts (see Appendix I) should be identified and be available to the regions to address unique questions. Thus, there should be a confirmed link at each level of the information ladder from EPA headquarters to the regions and to the states.

To ensure national consistency to the appropriate degree and still allow for site-specific applications as appropriate, periodic conference calls or electronic mail exchanges between the contacts for a specific standard should be held following rule promulgation to exchange questions and answers. The regional offices are expected to regularly communicate with the state, local, and tribal entities in their region. Regional offices should also help build a body of frequently

asked questions and answers for sharing among the implementors. For questions and answers that are not straightforward, the Regional Air Toxics Coordinators should discuss options and seek input and/or review from OECA, OGC, and OAQPS as appropriate. To maintain consistency, these questions and answers should be discussed and drafted among the group, and approved by the delegated authority. They should also be made available via the Unified Air Toxics Website. In addition, the implementing agencies should take advantage of the EPA's and STAPPA's electronic services.

As mentioned before, a SMIP could include lists of available resources such as EPA Internet websites and websites of the states. In addition to providing access to official guidance documents and formal response to questions, both EPA and STAPPA have electronic means to share draft responses and issue papers among the implementors. Using such means to share information can reduce the risk of an implementor responding incorrectly because of a lack of understanding of the question. Sharing information is also important for reducing overlapping or conflicting implementation efforts.

## 4.2 Identifying the Source Population Subject to the MACT Standard

Identifying a regulation's affected source population is not always a clear process, but is a necessary step during the early implementation of the rule. For some regulations that affect only large facilities, this will not be a concern because most state or local programs are aware of all the large facilities in their jurisdiction. However, in other cases, identifying the population may be a daunting task if sources are numerous, small, or collocated. To simplify this process, EPA has prepared a "Cookbook" to guide agencies through various identification techniques using a screening process based on available data. The Cookbook was pilot tested in several states and the results are included in the final version. The Cookbook is included as Appendix G to this document.

Even after finding potential sources, some questions may remain about a rule's applicability. While these questions generally need to be addressed on a case-by-case basis, EPA

can provide information to assist in these efforts. The Applicability Determinations Index is a useful tool to determine if a question has been previously addressed. EPA also can produce example applicability determinations. For example, for the Hazardous Organic NESHAP (HON), three applicability determination examples were produced which were very helpful and possibly prevented some erroneous determinations.

Throughout the source identification process, the delegated agency will be the official decision maker on applicability determinations. The delegated agency should maintain good communications with EPA according to the terms of the delegation.

## 4.3 Outreach

Outreach is targeted for the general public and regulated community. Outreach opportunities include using literature to disseminate information about an industry; attending training courses, trade shows, or meetings; and coordinating with the Small Business Assistance Program. In many cases, outreach efforts and source population identification are occurring at the same time. For example, the Small Business Assistance Program may have information on affected sources to provide to implementors as well coordinating with implementors to provide information to affected small businesses.

Literature may include fact sheets EPA prepared during rule development or pamphlets produced by the EPA regional office or a state/local/tribal entity to address specific needs of the permitting authority or geographic area. EPA also considers preparing plain-English guides (or other languages) for the regulations, especially those involving area sources or those affecting small businesses. For example, the draft Plain-English Guide for Perchloroethylene Dry Cleaners was a very useful and popular document at a Southern Dry Cleaners Show.

The SMIP should contain sections about pollution prevention opportunities so that the regulated sources can be educated in that topic and pollution prevention activities can be implemented as part of the compliance scheme. Technical summary sheets should have a section

that highlights pollution prevention options in the rule and/or voluntary pollution prevention measures the affected source category could take. The plan may also list regional contacts for pollution prevention information.

Education efforts such as training courses may also provide outreach opportunities. Some courses targeted for the implementors may also be appropriate for a public audience and vice versa. To that end, implementors may be able to attend seminars sponsored by industry organizations. Often EPA provides technical assistance to these seminars through expert speakers and other materials. These seminars create excellent opportunities to train the implementors while gaining some of the industry's perspective on the rules.

Other training opportunities include satellite downlink courses. These courses are usually presented by EPA through a university grant and often have trade associations as joint sponsors. These courses involve EPA, state, and industry representatives, and the resulting videotapes can be distributed to an even wider audience.

Implementing agencies should also contact industry associations to arrange outreach efforts. EPA can facilitate this effort by including names of associations contacted during standard development and identify any assistance or information the associations may offer. Such information can be included in the SMIP. The implementing agency should also offer to attend trade shows and address association meetings. Many times the organizations desire the regulatory agency's presence and will provide free space within the shows for displays about the standards.

Just as during the education phase, the implementors should take full advantage of the information available electronically. The EPA and state websites, and potential telephone hotlines would particularly be useful in outreach efforts, if these resources are properly equipped and advertised.

The implementing agency should also remember that the time frame for completing the source population identification and outreach may be up to three years or as short as six months.

The SMIP will quickly identify this time limit and provide recommendations an implementing agency may consider to make appropriate plans.

## 4.4 Small Business Needs

The implementation strategy concepts apply both to MACT standards for large industry and small businesses. All implementing agencies should coordinate with the Small Business Assistance Program for their area to assure that they have an appropriate understanding of the rules and access to training and literature. This coordination is very important to ensure compliance with SBREFA and EPA's small business policies. Each implementing agency needs to understand that small businesses may be major sources and that the Small Business Assistance Program is a major participant for any rule affecting small business entities.

If a rule is subject to the Small Business Regulatory Enforcement Fairness Act (SBREFA), there are specific requirements for the development and distribution of SBREFA Compliance Guides. EPA must prepare one or more publications as small entity compliance guides, explain in these guides the actions a small entity must take to comply, and distribute these guides to small entities through comprehensive sources of information. For example, trade associations may be appropriate for some industries, and the Small Business Assistance Program may be appropriate for others. The CAA gives the EPA broad discretion under SBREFA with regard to implementation, development, and distribution of the guides. Further information is located in Appendix J, Small Business Regulatory Enforcement Fairness Act.

## 4.5 Compliance Assurance

After educating themselves, the regulated community, and the public, and after locating the sources, the implementors must turn to assuring compliance with the rule. Although different agencies have different organizations and procedures for compliance assurance, certain major activities are universal. First, the implementor must establish a system to track compliance. There is no new tracking or reporting requirement mandated by this document, but rather, the

specific requirements will be agreed to as part of the Performance Partnership Agreement. Systematic tracking supplies quick and easy analysis of a source's compliance status and the success of the implementation efforts. Initially, the tracking includes receipt of notifications and grows to periodic reports and inspection results. To accomplish this, the Aerometric Information Retrieval System (AIRS) is available. An internal system, MACTRAX, is also an option as long as the AIRS reporting commitments are still met. See Appendix L on the MACTRAX System.

If AIRS is used for tracking, the appropriate data should be entered. If an action code is missing, the regional office should be notified to have it added. Stand-alone tracking systems may also be established. This may be advantageous during the early implementation stages to track all the initial notifications, compliance status notifications, and first periodic reports. Stand-alone systems provide faster access to compliance data, and the report writing capabilities may be more flexible. Nevertheless, all required data must be entered into AIRS, and the use of a stand-alone system is a matter of preference.

Another compliance activity is inspections. Individual affected sources should be targeted for regular inspections beginning after a rule's first substantive compliance date. If a rule has staggered substantive compliance dates, then additional targeting is necessary. This is especially important for the regional offices which have limited field presence. Whatever targeting model is used, its weighting factors should be adjusted after a compliance date to ensure that MACT sources are inspected. In subsequent iterations, the weighting factors can then be reduced to normal levels merely to ensure continuous regular inspections. Example inspection checklists are included as Appendix H.

While conducting inspections, the implementor will need to consider whether violations will be addressed with compliance assistance or enforcement proceedings. Furthermore, because of resource limitations, compliance assistance priorities should consider where assistance is most needed and most effective. For example, sources which are expected to have difficulties in complying, like area sources, small businesses, or sources predominantly owned by persons who may not understand English well may be the best candidates for compliance assistance. Also, one

should note that compliance assistance is only a part of compliance assurance. Assistance is when the implementor helps define and works with the regulated source in how to achieve compliance. Assurance is all the activities the implementor conducts to achieve, monitor, maintain, and track industry compliance, short of enforcement. These activities are the precursors to enforcement, when necessary, and naturally include compliance assistance.

Compliance assistance is also a major factor when dealing with small businesses. The small business programs were created to provide information to small businesses requesting compliance assistance. Compliance assistance will likely be the response for deficiencies found at small businesses which report deficiencies voluntarily. Again, appropriate coordination with the Small Business Assistance Program is critical during this phase of compliance assurance. Please note that the Small Business Assistance Programs may also conduct site visits.

During this phase, EPA encourages the implementor to present pollution prevention goals as part of the source inspections. The inspectors should have checklists so that they can easily identify the necessary pollution prevention activities. Also, the checklists could have suggestions for other prevention activities which are not required by the rule. The checklists could be similar to the inspection checklists developed for the dry cleaning facilities MACT standard (see Appendix H1). Since pollution prevention activities are not always required by the rule, some states may not be able to incorporate pollution prevention into their inspection scheme. If this is the case, a great effort at pollution prevention education during the outreach phase of implementation is all the more important.

Lastly, all federal compliance assurance activities should be coordinated with the state, local, and tribal entities (See Sections 2.0 and 3.0). This will avoid conflicts and help EPA focus its resources.

## 4.6 Enforcement

When a violation is discovered at a major source, the implementor should proceed according to the guidance on "Timely and Appropriate Enforcement Response to Significant Air Pollution Violators.[1]" The purpose of the guidance is to enable the implementors to focus enforcement efforts on the highest priority of noncomplying sources and to do so in a timely manner. The SMIP may include an Enforcement Response Plan (ERP) as guidance on specific conditions when enforcement is necessary. For all enforcement actions, pollution prevention benefits should be explained, and the use of pollution prevention projects should be encouraged when an enforcement settlement is going to include supplemental environmental projects (SEPs).

## 4.7 Reference Materials

During rule development and certainly at promulgation, various participants need to gain an understanding of the requirements in the rule and its associated infrastructure. Good sources of information are the documentation that EPA generated during rule development such as technical and general fact sheets, Federal Register notices, the rule itself, and the technical support document that includes the basis for the rule. These documents are usually available promptly on EPA's electronic bulletin boards/websites and specifically on the EPA/STAPPA/ALAPCO Unified Air Toxics Website (See Appendix D for website information). Sometimes additional information prepared by EPA and the state and local agencies is on the website or available through hypertext links to other sites. In the near future, this website will contain information on each MACT standard and its implementation. In order to share information and to avoid duplicate efforts, this strategy recommends that EPA lead a joint effort with STAPPA to coordinate the development of tools and make them available on the Unified Air Toxics Website.

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[1]Guidance on the Timely and Appropriate (T&A) Response to Significant Air Pollution Violators (SVs). Memorandum from John S. Seitz and Robert Van Heuvelen, U. S. Environmental Protection Agency, Office of Air Quality Planning and Standards, to Air Directors and Regional Counsels. February 7, 1992.

It is essential to the SMIP that a list of available resources for the MACT standard are mentioned with specific instructions on how to access them.

## 4.8 Other

During each phase of the implementation of a rule, the implementors will have to deal with additional considerations that will impact their activities. Some may only affect certain state, local, or tribal entities or geographic areas while others will be more universal. Some of the universal considerations include resources, permitting, requests for compliance extensions and waivers, and impact of SBREFA. The SMIP can provide some assistance with these issues, but individual planning will be required to adapt the strategies to the structure of each regulating agency.

### 4.8.1 Resources

A successful implementation strategy should consider all possible aspects of implementation, including resources. The availability of resources is always a factor in how much work can reasonably be performed. Choices will need to be made on where the resources can be used most effectively and efficiently.

The implementation support activities will likely be in direct proportion to the resources allocated for such efforts. During the MACT standard development process, PRG/ITPID, ESD, OECA, and the implementors should discuss possible implementation efforts and prioritize them with emphasis on the critical elements. The EPA/STAPPA/ALAPCO Committees on Air Toxics and Training are two current venues that PRG is using to help prioritize needs.

Because implementation needs will likely continue to be greater than the directly available resources, PRG/ITPID will pursue additional approaches for completing the identified critical elements of the SMIP. PRG/ITPID may ask implementors to volunteer to prepare certain materials or share costs with others to prepare specific items. For example, an industry trade

group may be able to provide a list of affected sources or develop training materials, or a regional office or state or local agency may be able to develop an inspection checklist or the SMIP. If these approaches are still insufficient to complete the critical materials, PRG will alert EPA managers and STAPPA/ALAPCO of the situation for resolution and they may bring the discussion to the Air Toxics Task Force, if appropriate.

### 4.8.2 Permitting

Several issues may need to be addressed with regard to permitting. If the source is yet to receive its operating permit, the implementor must ensure that the permit includes the applicable requirements of the rule. Also, if the permit has been issued and is not going to expire within three years, then the implementor must reopen the permit to include the applicable requirements of the MACT standards. For rules that apply only to major sources there will be discussions concerning potential to emit and ways to ensure that the source may keep its potential below the MACT cutoffs and Title V requirements. In this case, the specific MACT implementation plan could provide examples or ideas about limitations that would be appropriate for a Federally Enforceable State Operating Permit (FESOP). Also, for sources that have requirements from more than one regulation, the source may want to take advantage of the streamlining opportunities afforded in the Title V White Paper 2.[1]

Other considerations may include requests for compliance extensions, waivers, and other determinations. These requests must be processed according to the time frames in the rule or general provisions. Much additional information on Title V and other policy and guidance is available on the EPA Title V Operating Permit Program website and the EPA Policy and Guidance website.

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[1]White Paper Number 2 for Improved Implementation of the Part 70 Operating Permits Program. Memorandum from Lydia N. Wegman, U. S. Environmental Protection Agency, Office of Air Quality Planning and Standards, to EPA Regional Office Directors. March 5, 1996.

## 5.0 DEVELOPMENT OF A SPECIFIC MACT IMPLEMENTATION PLAN

### Section Summary

This section defines and discusses "baseline" and "enhanced" efforts for the development of implementation materials, decision making tools and processes for determining recommended level of effort for a MACT Standard, and the Tool Development Agreement (TDA).

This section describes activities recommended to effectively develop a Specific Model Implementation Plan (SMIP) using the strategy presented in Section 4.0 and tailoring it to the specific MACT standard. An assessment is made of the complexity of the standard and the expected implementation needs. Based on that assessment, a SMIP is developed for that standard which includes a Tool Development Agreement (TDA) that is agreed to by the participants. The SMIP should reflect that follow-up and tracking activities are necessary after promulgation. See Figure 5-1 for a flow diagram illustrating this process.

The implementation may require different levels of effort and resources for each MACT standard. The Program Review Group (PRG) in the Information Transfer and Program Integration Division (ITPID) has the lead role in encouraging the development of a SMIP, and for coordinating the activities recommended for successful implementation as specified in Section 4.0, as resources allow. PRG is specifically responsible for developing a TDA that ensures that the critical implementation materials are prepared or the gap between the need and the resources available is elevated to EPA managers and STAPPA/ALAPCO as discussed in Section 4.8.1. As shown in Tables 2-1 through 2-5 (and Table 5-1), ITPID is not responsible for all implementation activities, or the actual preparation of all implementation materials. Rather, PRG/ITPID will focus on developing the TDA, coordinating the production of the materials, and preparing some of the materials. Actual preparation of these materials will be shared among the implementors (both EPA and non-EPA).

## 5.1 Assessment of MACT Standards

### 5.1.1 Baseline Implementation Materials and Enhanced Implementation Materials

Certain implementation materials have been identified as "baseline" materials that would be beneficial for every MACT standard. Any additional items are categorized as "enhanced" materials. The following subsections describe the decision making process for planning the level of effort for a MACT standard. For the purposes of this discussion and preparation of the TDA, the following items are considered "baseline" implementation materials:

**Administrative**

- Contacts list (e.g., Permitting Authority, Regional Offices, ITPID, ESD, OECA, OGC);
- Specific delegations guidance where generic guidance is not sufficient;
- Summary of recordkeeping and reporting requirements;
- Specific compliance certification/assurance and enforcement policies/guidelines where generic guidance is not sufficient;
- Specific data reporting information (AIRS database training, MACT database training, MACTRAX) where generic guidance is not sufficient; and
- Timeline: compliance schedule (i.e., summary of compliance deadlines).

**Technical**

- Fact sheets/summary of the standard;
- Currently available list of affected sources and locations;
- Examples of applicable reporting forms (e.g., initial notification, initial statement of compliance for each control device, checklists);
- Inspector checklists;

- Summary of testing and monitoring requirements;
- Summary of operations and maintenance plans/requirements (if required by MACT);
- Technical support document;
- Specific guidance on relationships to Title V, NSR, Potential to Emit (PTE) where generic guidance is not sufficient;
- Sample calculations; and
- Applicability flowcharts.

Other implementation materials have been identified as "enhanced" materials. These items may be useful for implementation of certain MACT standards, in addition to the baseline items. How to determine the need for the development of these additional materials is discussed in the following subsections.

For purposes of this discussion and preparation of the TDA, the following items are "enhanced" implementation materials to be considered:

**Technical Training**

- Satellite downlinking training sessions;
- Workshops (at 1 or more sites near implementors);
- CD-ROM interactive tools on training;
- Federal Register hypertext;
- VHS training tapes;
- On-site training and certification (i.e., at a source) (for implementors or perhaps sources in conjunction with Small Business Assistance Program or Trade Association);
- Test method training; and

- Example conditions for Title V operating permits.

**Source ID/Outreach/Small Business Assistance**

- Source identification materials (beyond ESD list and Source ID Cookbook);
- Brochures/pamphlets/plain-English guides (outreach materials);
- Public meetings;
- Small business outreach materials;
- Small business assistance training; and
- SBREFA Compliance Guide (if necessary).

When determining if enhanced efforts may be needed, the implementors may want to consider other important factors such as the potential for emission or risk reduction, the degree of public interest in the standard or regulated industry, or other factors that can affect the overall significance of a particular MACT standard. In any case, the implementor's judgement should always prevail in dictating the starting point for any implementation effort as well as deciding whether to incorporate additional implementation materials.

### 5.1.2 Interview with MACT Development Team and Representative Implementors

Tools are available to help PRG and all the implementors plan the expected implementation needs for each MACT standard. A list containing several types of questions is useful as a starting point for the initial information gathering phase (see Appendix A). PRG takes the lead in scheduling and interviewing the MACT development team (usually ESD, but may be a regional office or state partner, in the case of MACT Partnerships) and representative implementors to get specific information on that standard and implementation needs. This information may be helpful in determining the necessary level of implementation effort. Ideas for particular implementation materials may also be identified during the interview.

### 5.1.3 Diagnostic Questionnaire

A diagnostic questionnaire (Figure 5-2) has been developed as a tool to allow implementors to systematically examine the different factors that may either justify or preclude the need for implementation materials beyond the baseline. The questionnaire considers the following factors:

- Complexity of the rule;
- Difficulty of determining applicability;
- Cost of compliance;
- Number and size distribution of sources and companies;
- SBREFA requirements;
- Capabilities of trade associations (which affects the need assessments and leveraging possibilities);
- Degree of controversy or acceptance of the rule by industry, state, local, and tribal entities, and the public; and
- Capabilities/technical expertise within the industry.

Each of the factors in the questionnaire influences the level of effort recommended for implementation of a particular MACT standard. For example, the presence of a small number of facilities in a regulated industry would tend to reduce the necessary implementation effort. Conversely, the presence of complex rule language would tend to increase the warranted level of effort. The questionnaire contains diagnostic questions that review the effects of the various factors and indicates whether enhanced materials would be useful for implementation of a specific MACT standard.

The availability of resources within the implementing agencies is always a factor in determining how much work can reasonably be performed; however, the questionnaire

deliberately does not include available resources as a factor for consideration because the initial determinations should be based on experience and technical expertise.

The questionnaire provides a format where points are assigned for each response. The points are totaled and a score of six or greater indicates that additional efforts should be considered.

### 5.1.4 Flow Charts for Enhanced Efforts

Flow charts are included as tools that may help determine where enhanced efforts would be useful. Figures 5-3 through 5-6 are flow charts for determining if technical training, source identification/notification, public outreach, or small business assistance may be necessary. Once a decision is made that enhanced implementation materials may be needed, the specific areas needing additional effort should be identified. The flow charts are intended to help with this decision-making process.

## 5.2 The Tool Development Agreement

Table 5-1 presents one tool, the TDA, that should be used by the MACT development team and implementors to reach preliminary agreement on the scope of the draft SMIP. PRG will take the lead on planning the development of the SMIP and coordinating among the various implementors. After consensus has been reached among the implementors on the preparation of baseline implementation materials, the areas where enhanced efforts are needed, and the lead for the preparation of each item/set of materials, the TDA for that MACT standard may be developed.

The baseline elements are shaded and are listed first in Table 5-1, followed by the enhanced elements. For each element listed, suggestions on the lead group and significant participants have been made. A blank TDA can be found as Appendix B to this document and

may be photocopied and used as a planning tool. The TDA contains three groups of columns which include the following items:

**Implementation Materials** - The items in this column are the building blocks that make up a complete MACT implementation plan. Some of the items in this plan will be specific to each MACT standard while others may be general language unless otherwise specified. For example, specific language may be used for delegation guidance exceptions and exceptions to compliance certification/assurance and enforcement policies/guidelines. Items marked with an asterisk represent those that will be general language unless the specific rule is an exception to the normal guidance.

**Y/N** - The Y/N column is to be used for MACT-specific decisions on what materials will be produced. This decision will be based on the knowledge and expertise of the implementors, with the assistance of the decision making tools (Figures 5-2 through Figure 5-6 and Appendix A).

**Lead Group** - If the material is identified as baseline or as a necessary enhanced tool for a particular MACT standard, a lead group responsible for coordinating the preparation of that piece of material will be identified as “lead” in this column. The lead group will not necessarily be the preparer of the material.

**Participants** - The final group of columns indicates participants in each implementation activity. Most of the implementation materials will need input or review from more than one group. For each item, a check mark indicates whether a certain group is expected to participate in the development of that material. This participation could be as a preparer or a reviewer, and does not exclude any other group from participating in the development of that item. Table 5-1 distinguishes responsibilities among nine potentially responsible entities. The entities are subdivided where responsibilities are specifically targeted for a particular group.

During MACT development, at promulgation and at compliance dates, ITPID and ESD will likely execute most of the efforts included for the baseline tools with some activities and materials performed or prepared by the regional offices, OECA, state, local and tribal entities, and the Small Business Assistance Program. However, the TDA can be tailored towards the specific needs of the implementors, as appropriate. A model TDA has been prepared and is included as Table 5-1. Again, all of these materials presume certain activities, roles, and responsibilities by the implementors in order to facilitate efficient and effective preparation of plans. The plans are designed to remain flexible so that additional ideas can be accommodated.

Because the MACT standards requiring enhanced implementation efforts are generally more complex than those requiring only baseline efforts, more intensive and extensive planning may be necessary. The SMIP may be coordinated with a working group or a team of implementors. In some cases, it may also be appropriate for the working group or a team to actively design and plan the SMIP. Such a Working Group or Team could include representatives from ESD, ITPID, EMAD, OECA, OGC, regional offices, state, local and tribal entities, the Small Business Assistance Program, and other entities, as needed. Ideally, these representatives would develop a detailed plan of action during rule development for implementation of the standard at promulgation. A key consideration in the SMIP and TDA is the timing of the preparation and availability of the elements. For example, the timing of efforts to promulgate the rule and develop implementation tools will have to be coordinated so that both efforts are as effective and efficient as possible.

## 5.3 Additional Elements of a Specific MACT Implementation Plan

The assessment of the MACT Standard and preparation of the TDA should happen prior to promulgation. Some tools may be drafted before promulgation, but many cannot be prepared until after the final promulgation details are known and signed. Other aspects of the MACT implementation process will also occur after promulgation, such as the following:

- Follow-up and tracking;

- Compliance assurance; and
- Enforcement.

All elements discussed in Section 4.0 should be considered for every MACT standard at some point in the implementation process. Each MACT standard will be unique and will need to be given individual consideration when developing the SMIP. It may not be possible to predict the effects of the standard, therefore, tracking with appropriate follow-up activity is necessary for successful implementation.

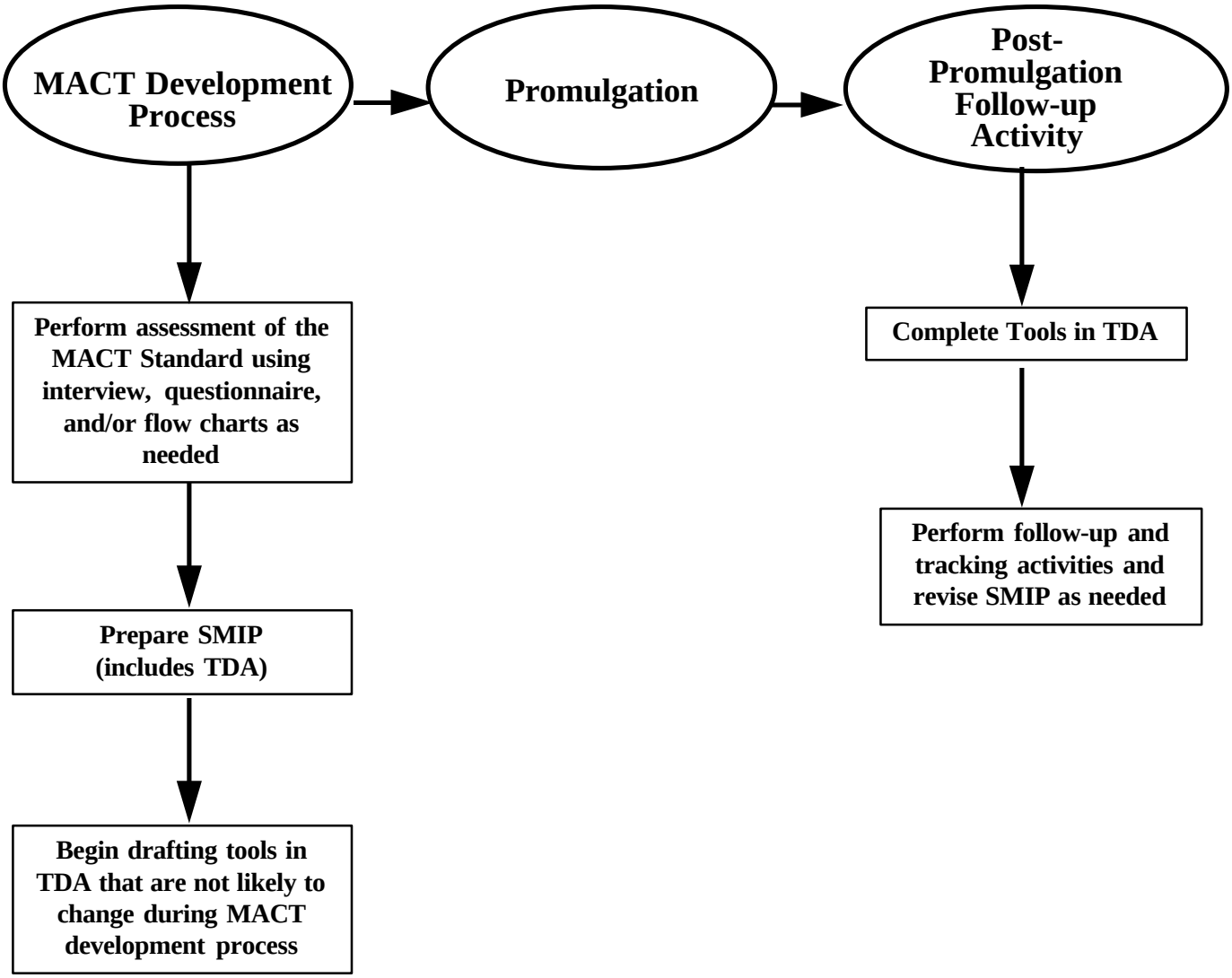



**Figure 5-1. Process for Developing a SMIP**

***Instructions: For each question below, choose the response that best represents the situation with your MACT standard. After answering all questions that apply, total your score by adding the numbers in parentheses that correspond to the answer chosen.***

***Scoring: 6 total points or greater suggests a need to utilize enhanced implementation materials beyond the baseline effort. See additional flow charts to determine what types of enhanced efforts are needed.***

1. How would you characterize industry's involvement in the development of the MACT standard?

   a. Positive (0)
   b. Negative (1)

2. Does the MACT standard contain different requirements from what is already in practice by most of the regulated industry?

   a. Yes (1)
   b. No (0)

3. How many states contain affected sources?

   a. Less than 4 (0)
   b. Between 4-10 (1)
   c. More than 10 (2)

4. How many affected sources are there?

   a. Less than 5 (0)
   b. Between 5 & 30 (1)
   c. More than 30 (2)

**Figure 5-2. Questionnaire for Determining Whether Materials Beyond the Baseline Level are Needed**

5. Is the average facility large or small? *("Large" is defined as being more than 500 employees and "small" being less than 500 employees for the purpose of this question.)*

a. Large (0)
b. Small (1)

6. Is the rule subject to SBREFA?

a. Yes (1)
b. No (0)

7. Is the rule complex? (e.g., the rule has many options for compliance)

a. Yes (1)
b. No (0)

8. Do the majority of the affected sources belong to a trade association?

a. Yes (0)
b. No (1)

9. Is it difficult for a source to determine applicability?

a. Yes (1)
b. No (0)

10. What is the cost to comply with this rule?

a. Minimal (0)
b. Significant (1)

***TOTAL: _____ points***

**Figure 5-2. Questionnaire for Determining Whether Materials Beyond the Baseline Level are Needed (Continued)**

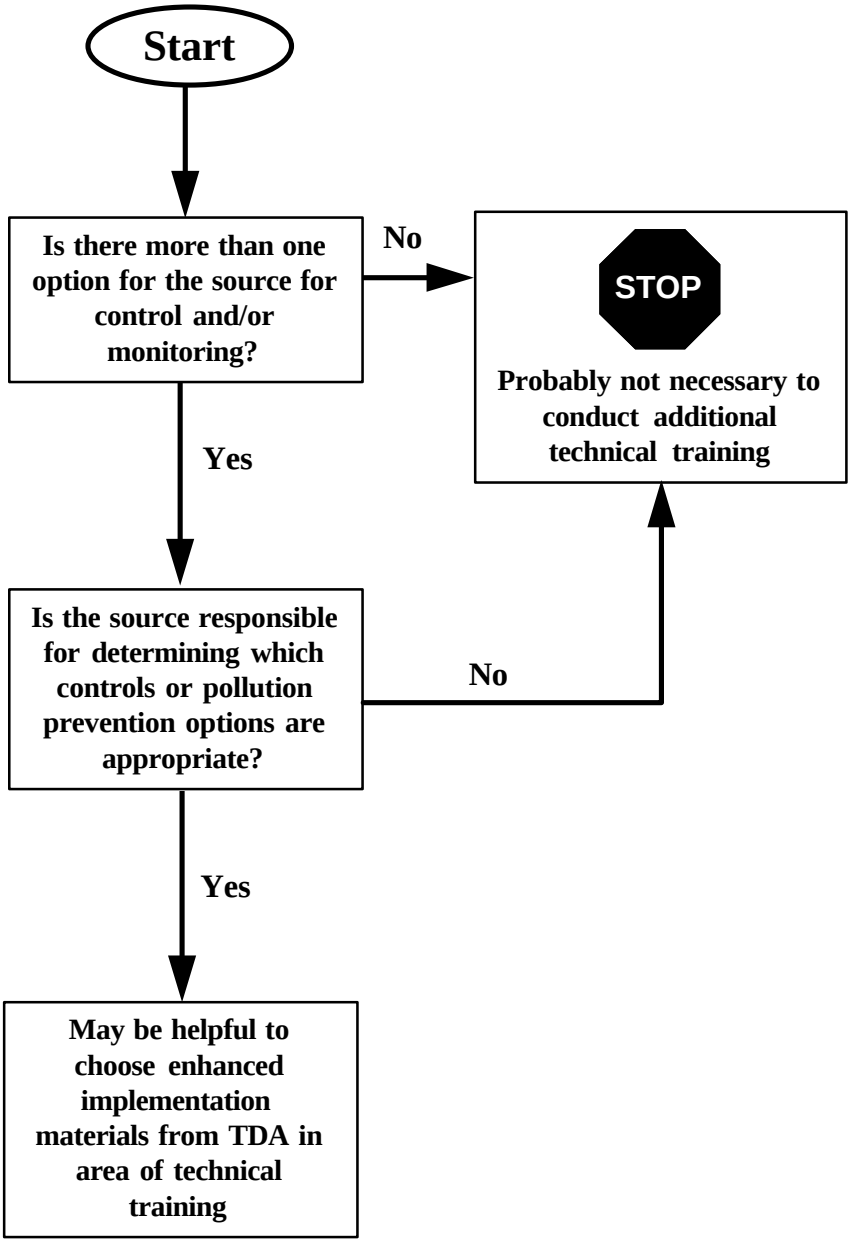



**Figure 5-3. Flow Chart for Determining if Enhanced Technical Training is Necessary**

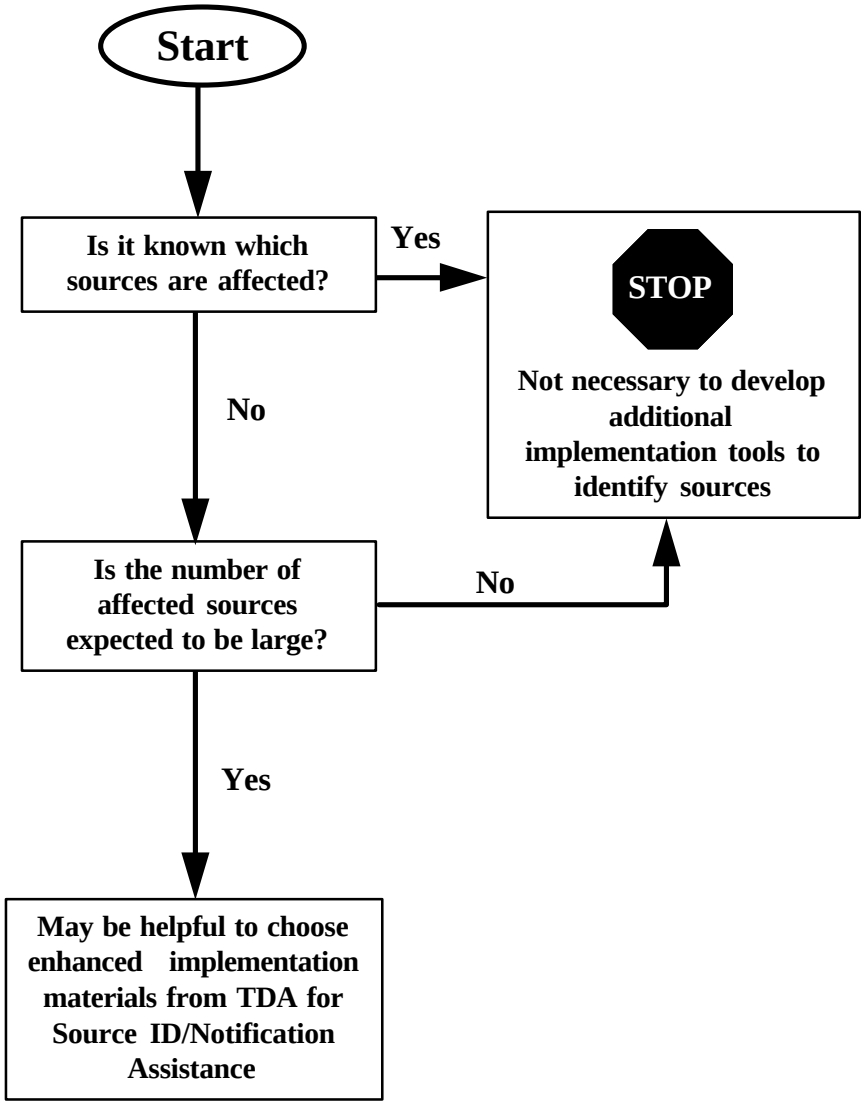



**Figure 5-4. Flow Chart for Determining of Enhanced Source ID/Notification is Necessary**

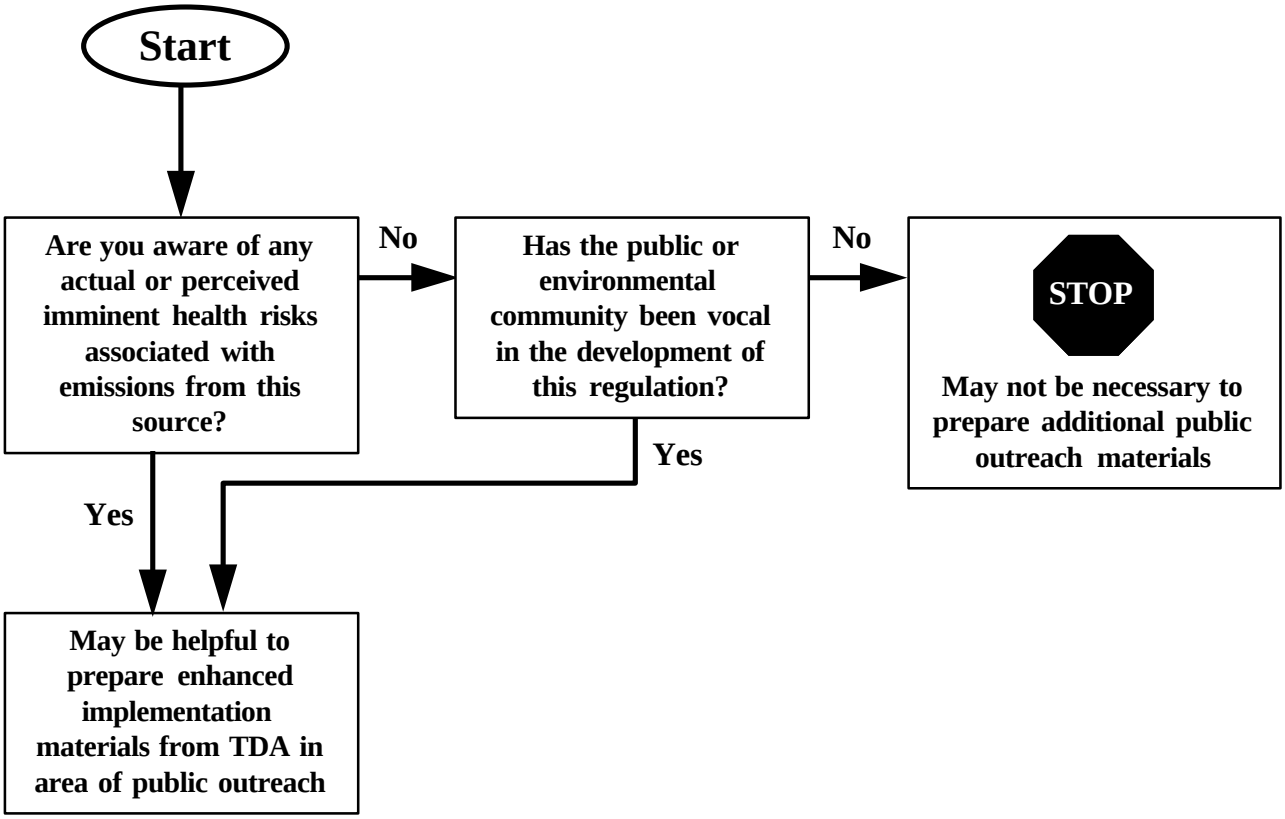
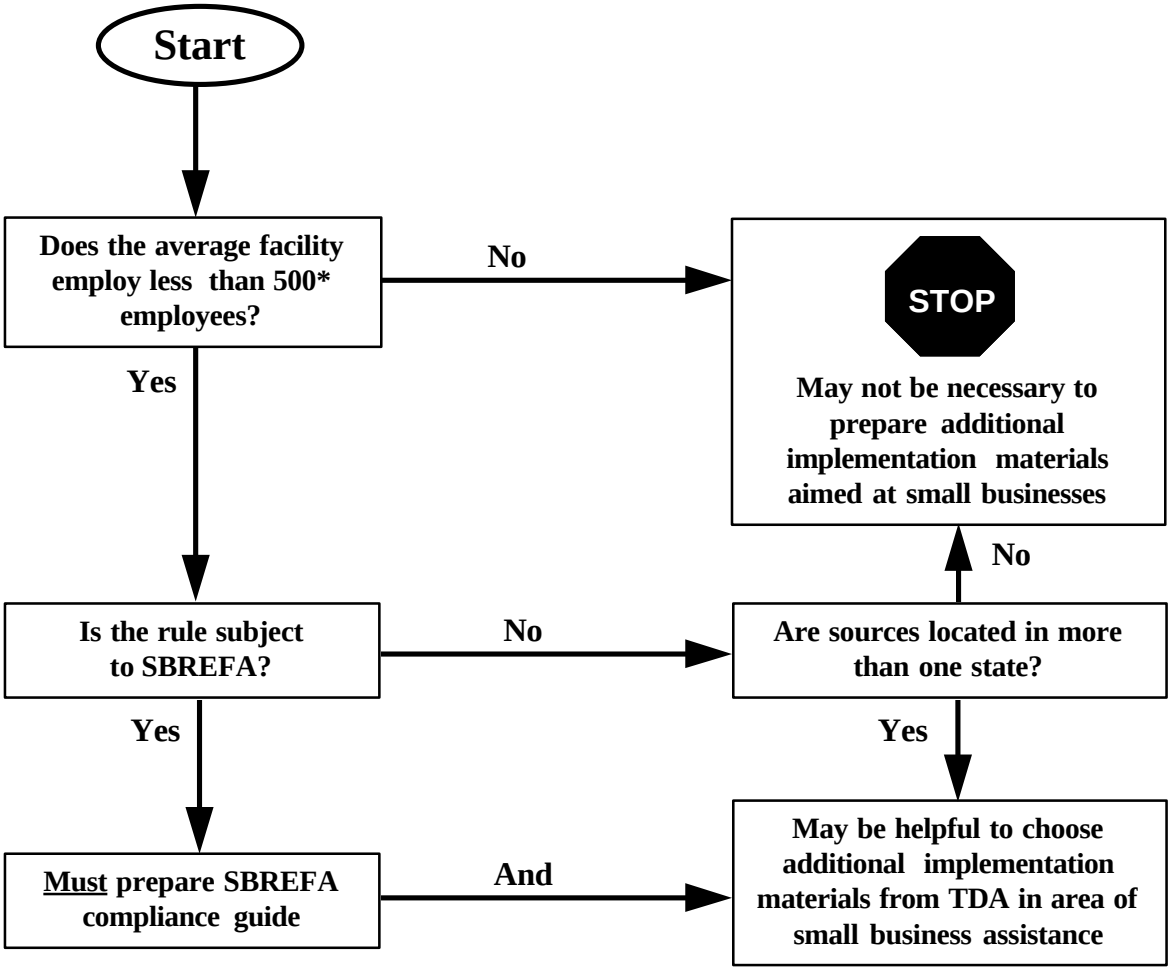



**Figure 5-5. Flow Chart for Determining if Enhanced Public Outreach is Necessary**




*** There is a specific definition for small business for each SIC code. These definitions are based on number of employees or dollar amount that the business must equal or be less than in order to qualify as a small business. A large portion of these SIC codes use 500 employees as the maximum number to qualify as a small business.**

## Figure 5-6. Flow Chart for Determining if Enhanced Small Business Assistance is Necessary

**MACT**:_____

## Table 5-1. Model Tool Development Agreement

| Implementation Materials | Y/N | Lead Group | Participants[a] | | | | | | | | | | | | | | | When Available |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | ITPID | | | | | | OECA | | PRRMS | EMAD | OGC | RO[c] | S/L/T[c] | SBAP | |
| | | | ESD | OPG | IIG | IMG | ITG | EOG | PRG[b] | OC | ORE | | | | | | | |
| **BASELINE** | | | | | | | | | | | | | | | | | | |
| ***Administrative*** | | | | | | | | | | | | | | | | | | |
| Contacts list for implementors | Y | PRG | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | Lead | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | at promulgation |
| Specific guidance on delegations* | Y | IIG | ✔ | | Lead | | | | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | | at promulgation |
| Summary of recordkeeping and reporting requirements | Y | ESD | Lead | | | ✔ | | | ✔ | ✔ | ✔ | ✔ | ✔ | | ✔ | ✔ | | at promulgation |
| Specific guidance on compliance certification, assurance, and enforcement policy* | Y | OC | ✔ | | | | | ✔ | ✔ | ✔ | Lead | | ✔ | ✔ | ✔ | ✔ | | at promulgation |
| Specific data reporting aspects of AIRS* | Y | IMG | ✔ | | | Lead | | | ✔ | ✔ | ✔ | ✔ | ✔ | | ✔ | ✔ | | at promulgation |
| Specific data reporting aspects of MACT database* | Y | IMG | ✔ | | | Lead | | | ✔ | ✔ | ✔ | ✔ | ✔ | | ✔ | ✔ | | at promulgation |
| Specific data reporting aspects of MACTRAX* | Y | PRRMS | ✔ | | | ✔ | | | ✔ | ✔ | ✔ | Lead | ✔ | | ✔ | ✔ | | at promulgation |

**MACT**:_____

## Table 5-1. Model Tool Development Agreement (continued)

| Implementation Materials | Y/N | Lead Group | Participants[a] | | | | | | | | | | | | | | When Available |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | ITPID | | | | | | OECA | | PRRMS | EMAD | OGC | RO[c] | S/L/T[c] | SBAP | |
| | | | ESD | OPG | IIG | IMG | ITG | EOG | PRG[b] | OC | ORE | | | | | | | |
| Timeline: compliance schedule | Y | ESD | Lead | | | | | | ✔ | ✔ | | | | ✔ | ✔ | ✔ | | at promulgation |
| ***Technical*** | | | | | | | | | | | | | | | | | | |
| Fact sheets (general, technical, and press release) | Y | ESD | Lead | | | | | ✔ | ✔ | ✔ | | | ✔ | ✔ | ✔ | ✔ | | at promulgation |
| Summary of the standard | Y | ESD | Lead | | | | | ✔ | ✔ | ✔ | | | ✔ | ✔ | ✔ | ✔ | | at promulgation |
| Currently available list of affected sources | Y | ESD | Lead | | | | | | ✔ | ✔ | | | | | ✔ | ✔ | | at promulgation |
| Examples of applicable reporting forms (e.g., initial notification, initial statement of compliance for each control device, checklists). | Y | OC | ✔ | | ✔ | | | | ✔ | Lead | ✔ | | | | ✔ | ✔ | | at promulgation |
| Applicability flow charts | Y | ESD | Lead | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | | at promulgation |
| Sample calculations | Y | ESD | Lead | | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | | at promulgation |

**MACT**:_____

## Table 5-1. Model Tool Development Agreement (continued)

| Implementation Materials | Y/N | Lead Group | Participants[a] | | | | | | | | | | | | | | When Available |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | ITPID | | | | | | OECA | | PRRMS | EMAD | OGC | RO[c] | S/L/T[c] | SBAP | |
| | | | ESD | OPG | IIG | IMG | ITG | EOG | PRG[b] | OC | ORE | | | | | | | |
| Inspector checklists | Y | OC | ✔ | | ✔ | ✔ | ✔ | ✔ | ✔ | Lead | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | at promulgation |
| Summary of testing and monitoring requirements | Y | ESD | Lead | | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | at promulgation |
| Operations and maintenance plans/ requirements | Y | ESD | Lead | | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | at promulgation |
| Technical support document | Y | ESD | Lead | | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | at promulgation |
| Special relationships to Title V, NSR, PTE* | Y | ESD | Lead | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | at promulgation |

**MACT**:_____

## Table 5-1. Model Tool Development Agreement (continued)

| Implementation Materials | Y/N | Lead Group | Participants[a] | | | | | | | | | | | | | | | When Available |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | ITPID | | | | | | OECA | | | | | | | | |
| | | | ESD | OPG | IIG | IMG | ITG | EOG | PRG[b] | OC | ORE | PRRMS | EMAD | OGC | RO[c] | S/L/T[c] | SBAP | |
| **ENHANCED** | | | | | | | | | | | | | | | | | | |
| ***Technical Training*** | | | | | | | | | | | | | | | | | | |
| "CD-ROM" interactive tools on training | | PRG | ✔ | | | | | ✔ | Lead | ✔ | ✔ | | ✔ | ✔ | ✔ | ✔ | | at promulgation |
| Federal Register hypertext | | PRG | ✔ | | | | ✔ | | Lead | ✔ | ✔ | | ✔ | ✔ | ✔ | ✔ | | 1-3 months after promulgation |
| Workshops (site-specific) | | OC | ✔ | | | | | ✔ | ✔ | Lead (NETI) | ✔ | | ✔ | ✔ | ✔ | ✔ | | 1-3 months after promulgation |
| Satellite downlink training sessions | | PRG | ✔ | | | | | ✔ | Lead | ✔ | ✔ | | ✔ | ✔ | ✔ | ✔ | | 1-3 months after promulgation |
| VHS training tapes | | PRG | ✔ | | | | | ✔ | Lead | ✔ | ✔ | | ✔ | ✔ | ✔ | ✔ | | 6 months after promulgation |
| On-site training and certification | | OC | ✔ | | | | | ✔ | ✔ | Lead (NETI) | ✔ | | ✔ | ✔ | ✔ | ✔ | | 6 months after promulgation |
| Example conditions for Title V operating permits | | ESD | Lead | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | | at promulgation |
| Test method training | | EMAD | | | | | | ✔ | ✔ | ✔ | ✔ | | Lead | | ✔ | ✔ | | 1-3 months after promulgation |

**MACT**:_____

## Table 5-1. Model Tool Development Agreement (continued)

| Implementation Materials | Y/N | Lead Group | Participants[a] | | | | | | | | | | | | | | When Available |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | ITPID | | | | | | OECA | | PRRMS | EMAD | OGC | RO[c] | S/L/T[c] | SBAP | |
| | | | ESD | OPG | IIG | IMG | ITG | EOG | PRG[b] | OC | ORE | | | | | | | |
| Test method training | | EMAD | | | | | | ✔ | ✔ | ✔ | ✔ | | Lead | | ✔ | ✔ | | 1-3 months after promulgation |
| ***Source ID/ Outreach/ Small Business*** | | | | | | | | | | | | | | | | | | |
| Source identification effort (beyond cookbook information provided in Appendix G ) | | OC | | | | | | | ✔ | Lead | ✔ | | ✔ | | ✔ | ✔ | | at promulgation |
| Brochures/ pamphlets/ Plain English Guides (outreach materials) | | PRG | ✔ | | | | | ✔ | Lead | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | ✔ | | at promulgation |
| Small business assistance training | | ITG | ✔ | | | | Lead | ✔ | ✔ | ✔ | ✔ | | ✔ | ✔ | ✔ | ✔ | ✔ | at promulgation |
| Small business outreach materials | | ITG | ✔ | | | | Lead | ✔ | ✔ | ✔ | ✔ | | ✔ | ✔ | ✔ | ✔ | ✔ | at promulgation |
| SBREFA compliance guide (if necessary) | | ESD | Lead | | | | ✔ | ✔ | ✔ | ✔ | ✔ | | ✔ | ✔ | ✔ | ✔ | ✔ | at promulgation |

a Participates as either a provider, preparer, or a reviewer (✔)

**MACT**:_____

## Table 5-1. Model Tool Development Agreement (continued)

b PRG is responsible for coordinating development of the SMIP and the TDA upon request by ESD and negotiations between ESD and PRG..
c Identify which regional office or which state/local agency
* Generic EPA guidance will be used unless this rule is an exception to that guidance.

| | |
|---|---|
| EMAD | Emissions, Monitoring and Analysis Division |
| EOG | Education & Outreach Group |
| ESD | Emissions Standard Division |
| IIG | Integrated Implementation Group |
| IMG | Information Management Group |
| ITG | Information Transfer Group |
| ITPID | Information Transfer and Program Integration Division |
| OC | Office of Compliance |
| OECA | Office of Enforcement and Compliance Assurance |
| OGC | Office of General Counsel |
| OPG | Operating Permits Group |
| ORE | Office of Regulatory Enforcement |
| PRG | Program Review Group |
| PRRMS | Planning, Resources and Regional Management Staff |
| RO | Regional Offices |
| SBAP | Small Business Assistance Program |
| S/L/T | State/Local/Tribal Entities |
| NETI | National Enforcement Training Institute |

# APPENDIX A

## Interview Questions for MACT Development Team and Implementors

**Interview Questions for MACT Developers and Implementors to Help Jointly Determine What is Needed for Implementation**

*This list of questions was designed as an optional **In-Person Oral Interview Guide or Tool** for informal discussions of currently available information (or where it may be obtained) as input for the developers and representative implementors to jointly develop an implementation plan (i.e., what is needed when) for a specific MACT standard. **Precise answers are not necessary**. Nor do all questions need to be answered at the time of the interview. The initial goal is merely to obtain enough information to develop a draft plan, including what tools are most needed..*

Affected Sources

1. How many sources are affected?
   What percentage are small?
   How many small business or governments are affected?
   Is rule subject to SBREFA?

2. Is it known which sources are affected?
   How exhaustive is the inventory?
   Is there a list of sources?
   Does it include locations, addresses, telephone numbers, contacts?
   Do you know anyone else that may have a source list?

3. Is this industry already Federally regulated? If so, how?
   Are there State/local/tribal rules? If so, what is their general level of control?

4. How many States have affected sources?
   How involved have the States and Regions been in developing this standard?
   How ready are the States to implement this standard?

Applicability

5. Explain how the source determines if this rule applies to them.
   Specifically, what does the source have to do to determine applicability?
   Is this straightforward? That is, what is the level of difficulty for small and large sources to determine applicability?
   Where is this protocol described?
   What additional information will the source need to obtain, develop, or record?

Cost of the Regulation

6. What is the cost to comply with this rule?

Benefits of the Regulation

7. What emissions reductions will be achieved?
   Which pollutants? What are the general health risks associated with these reductions?

Coordination with Stakeholders

8. What level of participation have you received from industry, trade groups, environmental groups, States, locals, Tribes?
   What outreach to States/locals/tribes and industry is necessary?
   What education do the Regional Offices need?
   Are they calling you with many questions? What would help them answer the questions?
   What outreach/education has been requested by the Stakeholders?
   What have you done or planned?

9. Who are the relevant trade groups?
   How active do you expect them to be in educating their members?

10. Who is the Office of Compliance contact?
    Office of Regulatory Enforcement?
    Office of General Counsel?
    Regional Office contacts?
    State contacts?
    Locals?
    Tribes?
    Permitting?
    What has been the level of participation of these individuals in rule development?
    Have they pointed out any implementation concerns?
    Have they committed to help on implementation aspects?

Real-World Climate

11. What is the climate in EPA, Congress, industry, States, locals, tribes, and the public for this rule? Is it a high-profile rule?
    Who are the advocates for this rule?
    Who are the adversaries for this rule?

12. Has EPA been sued or do you expect EPA to be sued on this rule?

Complexity of the Rule and Compliance Assurance

13. How complex are the requirements?
    What are the control and monitoring requirements of the MACT?
    How many options are there?
    How does the source determine which controls or pollution prevention options are appropriate?
    Are the monitoring requirements consistent with the enhanced monitoring provision of section 114(a)(3)? (timely, accurate, replicable) If not, how do they differ?
    What are the monitoring system performance specifications and calibration and QA/QC requirements? Monitoring data availability requirements?
    Are any excursions from required monitoring parameters excused from consideration as violations of the emission standard?
    What are the reporting and recordkeeping requirements?

14. Does the standard require the source to develop inspection/maintenance procedures and an operating plan? What are the criteria for approvable procedures and plans?

15. Are inspector checklists needed? Would they be helpful to Regional Offices, states, locals, tribes, industry? Are examples available?

16. Are there example forms or checklists for the source to use for demonstrating compliance?

17. What are the compliance dates?

18. Is there an Enabling Document available? Are there any gaps in the information available?

# APPENDIX B

# Tool Development Agreement

**MACT**:_____

# Tool Development Agreement

| Implementation Materials | Y/N | Lead Group | Participants[a] | | | | | | | | | | | | | | | When Available |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | ESD | ITPID | | | | | | OECA | | PRRMS | EMAD | OGC | RO[c] | S/L/T[c] | SBAP | |
| | | | | OPG | IIG | IMG | ITG | EOG | PRG[b] | OC | ORE | | | | | | | |
| **BASELINE** | | | | | | | | | | | | | | | | | | |
| ***Administrative*** | | | | | | | | | | | | | | | | | | |
| Contacts list for implementors | | | | | | | | | | | | | | | | | | |
| Specific guidance on delegations* | | | | | | | | | | | | | | | | | | |
| Summary of recordkeeping and reporting requirements | | | | | | | | | | | | | | | | | | |
| Specific guidance on compliance certification, assurance, and enforcement policy* | | | | | | | | | | | | | | | | | | |
| Specific data reporting aspects of AIRS* | | | | | | | | | | | | | | | | | | |
| Specific data reporting aspects of MACT database* | | | | | | | | | | | | | | | | | | |
| Specific data reporting aspects of MACTRAX* | | | | | | | | | | | | | | | | | | |
| Timeline: compliance schedule | | | | | | | | | | | | | | | | | | |

**MACT:**_____

## Tool Development Agreement (continued)

| Implementation Materials | Y/N | Lead Group | Participants[a] | | | | | | | | | | | | | | | When Available |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | ESD | ITPID | | | | | | OECA | | PRRMS | EMAD | OGC | RO[c] | S/L/T[c] | SBAP | |
| | | | | OPG | IIG | IMG | ITG | EOG | PRG[b] | OC | ORE | | | | | | | |
| ***Technical*** | | | | | | | | | | | | | | | | | | |
| Fact sheets (general, technical, and press release) | | | | | | | | | | | | | | | | | | |
| Summary of the standard | | | | | | | | | | | | | | | | | | |
| Currently available list of affected sources | | | | | | | | | | | | | | | | | | |
| Examples of applicable reporting forms (e.g., initial notification, initial statement of compliance for each control device, checklists). | | | | | | | | | | | | | | | | | | |
| Applicability flow charts | | | | | | | | | | | | | | | | | | |
| Sample calculations | | | | | | | | | | | | | | | | | | |
| Inspector checklists | | | | | | | | | | | | | | | | | | |
| Summary of testing and monitoring requirements | | | | | | | | | | | | | | | | | | |

**MACT:**_____

## Tool Development Agreement (continued)

| Implementation Materials | Y/N | Lead Group | Participants[a] | | | | | | | | | | | | | | When Available |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | ESD | ITPID | | | | | | OECA | | PRRMS | EMAD | OGC | RO[c] | S/L/T[c] | SBAP | |
| | | | | OPG | IIG | IMG | ITG | EOG | PRG[b] | OC | ORE | | | | | | | |
| Operations and maintenance plans/ requirements | | | | | | | | | | | | | | | | | | |
| Technical support document | | | | | | | | | | | | | | | | | | |
| Special relationships to Title V, NSR, PTE* | | | | | | | | | | | | | | | | | | |
| **ENHANCED** | | | | | | | | | | | | | | | | | | |
| ***Technical Training*** | | | | | | | | | | | | | | | | | | |
| "CD-ROM" interactive tools on training | | | | | | | | | | | | | | | | | | |
| Federal Register hypertext | | | | | | | | | | | | | | | | | | |
| Workshops (site-specific) | | | | | | | | | | | | | | | | | | |
| Satellite downlink training sessions | | | | | | | | | | | | | | | | | | |
| VHS training tapes | | | | | | | | | | | | | | | | | | |
| On-site training and certification | | | | | | | | | | | | | | | | | | |

**MACT:**_____

## Tool Development Agreement (continued)

| Implementation Materials | Y/N | Lead Group | Participants[a] | | | | | | | | | | | | | | When Available |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | ESD | ITPID | | | | | | OECA | | PRRMS | EMAD | OGC | RO[c] | S/L/T[c] | SBAP | |
| | | | | OPG | IIG | IMG | ITG | EOG | PRG[b] | OC | ORE | | | | | | | |
| Example conditions for Title V operating permits | | | | | | | | | | | | | | | | | | |
| Test method training | | | | | | | | | | | | | | | | | | |
| ***Source ID/ Outreach/ Small Business*** | | | | | | | | | | | | | | | | | | |
| Source identification effort (beyond cookbook information provided in Appendix G ) | | | | | | | | | | | | | | | | | | |
| Brochures/ pamphlets/ Plain English Guides (outreach materials) | | | | | | | | | | | | | | | | | | |
| Small business assistance training | | | | | | | | | | | | | | | | | | |
| Small business outreach materials | | | | | | | | | | | | | | | | | | |
| SBREFA compliance guide (if necessary) | | | | | | | | | | | | | | | | | | |

a Participates as either a provider, preparer, or a reviewer (✔)

b PRG is responsible for coordinating development of the SMIP and the TDA upon request by ESD and negotiations between ESD and PRG..

**MACT:**_____

# Tool Development Agreement (continued)

c Identify which regional office or which state/local agency
* Generic EPA guidance will be used unless this rule is an exception to that guidance.

| | |
|---|---|
| EMAD | Emissions, Monitoring and Analysis Division |
| EOG | Education & Outreach Group |
| ESD | Emissions Standard Division |
| IIG | Integrated Implementation Group |
| IMG | Information Management Group |
| ITG | Information Transfer Group |
| ITPID | Information Transfer and Program Integration Division |
| OC | Office of Compliance |
| OECA | Office of Enforcement and Compliance Assurance |
| OGC | Office of General Counsel |
| OPG | Operating Permits Group |
| ORE | Office of Regulatory Enforcement |
| PRG | Program Review Group |
| PRRMS | Planning, Resources and Regional Management Staff |
| RO | Regional Offices |
| SBAP | Small Business Assistance Program |
| S/L/T | State/Local/Tribal Entities |
| NETI | National Enforcement Training Institute |

# APPENDIX C

## Cost Estimates for Education and Outreach

## COST ESTIMATES FOR EDUCATION AND OUTREACH

| COST | ACTIVITY |
|---|---|
| $25,000 | Estimated cost to develop one day of a classroom training course (e.g., a four day course would be $100,000). This estimate also holds for development of self-study materials and technical manuals, with a manual of about 250 pages being roughly equivalent to a 3 day classroom course (i.e, $75,000). |
| $ 2,800 | Studio usage for about 5 hours. Includes taping, re-takes and some graphics support. This amount is also used in estimating the studio costs for a 5 hour (one day) broadcast. |
| $ 2,800 | plus travel expenses. Estimated cost for field shoots using two people and camera for about half a day. |
| $ 400 | Estimated hourly cost for uplink usage. |
| $ 1,500 | Estimated cost per minute for finished, broadcast quality video tape. This is known as a NOVA quality video. |

**NOTES**:

- Costs associated with development of high quality CD-ROMS are not yet available.
- These estimates or "Rules of Thumb" are only rough estimates that should be helpful in early training and planning sessions. These estimates are still tentative and are subject to change.
- These estimates can and must be substantially more refined as specific requirements are known. So, the earlier the Education and Outreach Group (EOG) becomes involved in the process, the more quickly a reliable cost estimate can be made.
- The EPA/STAPPA/ALAPCO Training Committee is currently developing a template for training efforts and has a continuing function of considering training priorities and coordinating efforts.
- For further information, contact Ron Townsend (919) 541-2498 for MACT-specific planning efforts.

# APPENDIX D

# Unified Air Toxics Website Information

# UNIFIED AIR TOXICS WEBSITE

**http://www.epa.gov/ttn/uatw/**
**SYSOP: Holly Reid, (919) 541-5344**
**Nancy Pate, (919) 541-5347**

**Purpose of Website** - To provide the general public, federal, state and local governments and sources of air toxics pollution information (from basic to very technical) in a centralized location on the internet. To encourage sharing of information, especially among the federal, state, and local governments in, order to reduce duplication of effort when implementing air toxics rules and programs..

Brief description of the 6 areas planned for this website:

**Basic Facts**

- Describes Unified Air Toxics Website
- Briefly explains what air toxics pollutants and their effects are
- Provides links to citizen guides and brochures on health risks of air toxics and other basic sources of information

**EPA Rules and Implementation**

- Lists all air toxics rules and closely related rules
- Provides links to all preamble and rule texts, related policy guidance and access to implementation materials produced by federal, state or local agencies.

**Pollutants and Sources**

- Lists the 188 toxic air pollutants regulated by the EPA
- Defines types of air toxic pollutants sources
- Lists 174 source categories of industrial and commercial sources of air toxics

**Technical Resources**

- List telephone information resources (such as hotlines) and internet technical information resources (such as centers, clearinghouses) with air toxics information
- Gives access to select published technical documents and links to document information resources

**EPA Programs**

- Describes air toxics programs and its major components
- Lists all EPA offices with air toxics responsibilities and describes their roles

**State and Local Agency Programs**

- Describes federal, state and local air toxics program partnership

- Lists state and local air agency program websites
- Provides a "sharing library" for states and local agencies without websites to display work products in one centralized location

**Topic Areas Per Source Category**

**Examples of Rule and Implementation Information on this Website**

- Proposals, Promulgations
- Background Information and Guidance documents
- FR text
- Contact List
- Fact Sheets (HQ press releases, source list, technical information reports, state fact sheets)
- Source Information (list of potential affected sources, 1990 document for developing source category list, 1987 Toxic Air Pollutant Source Crosswalk)
- MACT Summary Table and tracking information
- Risk information
- Outreach materials
- Training and workshops
- Presentation and workshops
- Semi-annual summary reports from MACTRAX (Delegation and implementation status)
- Schedules
- Permitting information (initial permit notification forms, permit conditions and guidance, non-traditional source information, inspection forms and checklists)
- Compliance, Assistance, and Assurance Information (sector notebooks, compliance data, applicability determination)
- Enforcement
- Environmental indicators
- Questions and answers subsystem

# APPENDIX E

# AIRS Facility Subsystem

# AIRS FACILITY SUBSYSTEM

- AIRS stands for Aerometric Information Retrieval System.

- AIRS is the database management system for the national database for ambient air quality, emissions (criteria and air toxics related), and compliance data, including permit tracking.

- The AIRS Facility Subsystem (AFS) is one of four subsystems under AIRS. Re- engineering project currently scheduled to begin in fiscal year 1998.

- Information included in AFS:

    - Number and location of facilities in a source category
    - Types of control equipment with efficiency estimates
    - Emissions estimations from EPA Reference test methods

- For more information, contact Chuck Isbell (ITPID/Information Management Group) at (919) 541-5448.

# APPENDIX F

## Example Specific Model Implementation Plan for Ethylene Oxide Commercial Sterilizers MACT Standard

# ***Example SMIP for Ethylene Oxide Commercial Sterilizers***

The following is a sample of what a Specific MACT Implementation Strategy should resemble. It includes an explanation of the implementation phases for this regulation. Additional implementation aids such as applicability flow charts or examples, source listings, trade associations, specific source identification techniques, standard permit language, inspection checklists, etc. are not included at this time but are under consideration.

Even though this regulation has already been promulgated, this sample implementation strategy is written as if it was published with the rule. As a result, some sections will refer to steps that may have already occurred.

**Regulation Summary**

- Regulation: Ethylene Oxide Sterilization Facilities
- This regulation controls ethylene oxide emissions for sterilization or fumigation operations.
- Citation: 40 CFR Part 63, Subpart O
- Published: 59 FR 62585
- Effective Date: December 6, 1994
- Applicability: All sterilization sources using ethylene oxide in sterilization or fumigation operations
- Exemptions: beehive fumigators, research and laboratory facilities, and operations at sources like doctor or veterinarian offices
- Categories:
  1. Sources using less than 1 ton of ethylene oxide are only required to keep records of 12 month rolling average of ethylene oxide use
  2. Sources using between 1 ton and 10 tons of ethylene oxide
  3. Sources using 10 tons or more of ethylene oxide
- Initial Notification:
  1. April 5, 1995 for existing sources, categories 2 & 3
  2. 120 days from startup for new sources, categories 2 & 3
- Compliance Dates:
  1. December 6, 1998 for sources with startup before December 8, 1998
  2. Upon startup for sources with startup on or after December 8, 1998

- Emission Points:
  1. Sterilization Chamber Vent
     99% reduction for categories 2 & 3
  2. Aeration Room Vent
     99% reduction or 1 ppmv for category 3
  3. Chamber Exhaust Vent
     99% reduction for category 3
     5300 ppmv for category 2

- Performance Tests: June 4, 1999 for existing sources, all emission points 180 days after startup for new sources, all emission points

- Notification of Compliance Status: August 3, 1999 for existing sources, all emission points 60 days after completion of performance tests for new sources, all emission points

**Phase One - Education**

EPA will be offering satellite training on this regulation on {date}. The regional offices should assess their own interest and that of their states and ensure appropriate attendance. The satellite training will also be video taped. The video tape will be available from {location}, and EPA expects the video to be available after {date}.

In addition to this training, EPA has issued a fact sheet which is available on the TTN bulletin board along with the regulation and the background information document. On TTN, the fact sheet and rule are dated November 23, 1994 and located in the "Recently Signed Rule" section of the Clean Air Act board. The background information document, dated June 17, 1993, is located in the "Title III" section of the same board. Furthermore, the OAQPS Title III online Q&A bulletin board is available for inquiries about this rule. This information is also accessible via the United Air Toxic Website at Http://www.epa.gov/oar/oaqps/airtox.

The following are a list of contacts for this rule:

| | | |
|---|---|---|
| OAQPS: | David Markwordt | (919) 541-0837 |
| OECA: | Karin Leff | (202) 564-7068 |
| Region 1: | {name} | |
| Region 2: | {name} | |
| Region 3: | {name} | |
| Region 4: | Phillip Barnett (404) 347-2904 | |
| Region 5: | {name} | |
| Region 6: | {name} | |
| Region 7: | {name} | |
| Region 8: | {name} | |
| Region 9: | {name} | |
| Region 10: | {name} | |

In addition, this rule may impact small businesses; additional assistance regarding this issue may be obtained the following regional small business contacts:

Region 1: {name}
Region 2: {name}
Region 3: {name}
Region 4: {name}
Region 5: {name}
Region 6: {name}
Region 7: {name}
Region 8: {name}
Region 9: {name}
Region 10: {name}

Each region should also establish a contact for each of its states and begin communication regarding the regulation. Regular conference calls, either for this rule alone or as part of a larger call, are appropriate.

**Phase Two - Source Population Identification**

Since this rule involves area sources, EPA recommends following the practices and procedures for identifying sources presented in the "Cookbook" prepared by EPA. Following these procedures, EPA does not anticipate any difficult applicability questions for these sources.

**Phase Three - Outreach**

EPA has prepared a fact sheet about this rule and is currently preparing an implementation document that includes summaries of the requirements of the rule, applicability flow diagrams, example recordkeeping and reporting forms, inspector checklists, and other information to help implementation. The video of the satellite training course may provide material to educate the regulated community about the rule. The implementing agency and regions should be available for any trade shows related to this industry. Coordination with the small business assistance program for this regulation is advised.

Source population identification and outreach for this rule should be executed quickly as the initial notifications are due by April 5, 1995 for existing sources. However, additional time for outreach is provided in that the first compliance date is December 6, 1998, for an existing source.

Although pollution prevention activities for this source category may be limited, affected sources should be encouraged to investigate alternative sterilization techniques like antiseptic washes and thermal drying or using an autoclave where such techniques may be appropriate.

Regional Pollution Prevention Contacts are:

Region 1 {name}
Region 2 {name}
Region 3: {name}
Region 4 {name}
Region 5 {name}:
Region 6: {name}
Region 7: {name}
Region 8: {name}
Region 9: {name}
Region 10: {name}

**Phase Four - Compliance Assurance**

This phase does not begin in earnest until after December 6, 1998. However, the initial notification is necessary by April 5, 1995. Appropriate information requests may be necessary to obtain all initial notifications.

Beginning in December 1998, the implementing agency should include this source category in their inspection planning. As part of this, the implementing agency needs to assure a presence in the regulated community particularly during the early period after a compliance date. If a state or local agency is implementing the rule and is inspecting all major sources, then the major ethylene oxide sterilization facilities will be addressed. If the state is using the Inspection Targeting Model or some other targeting method, the agency should assign enough weight to this source category to insure appropriate coverage. Area sources within a state are somewhat different. Compliance assurance may be achieved by a combination of techniques including requiring reports, certifications, record keeping, etc. These factors are usually imposed through the permitting process.

If EPA is the implementing agency, targeting of major and area sources for inspection is also needed. Due to EPA's more limited number of inspectors, consideration of regional resources is important. EPA can maintain a sufficient presence within the sector by using regional personnel and perhaps contractors. Furthermore, even if EPA is not the implementing agency, the regional office may wish to establish a small federal inspection presence among the sterilization facilities.

As time moves beyond the compliance date, less emphasis to this sector may be applied if compliance rates are good. However, after several years, the sector should be targeted again. In order to determine compliance rates, the implementing agency must establish a tracking system. AIRS is available for this function. If an implementing agency uses another system other than AIRS, the agency must also ensure that AIRS is updated in accordance with EPA policy on minimum data elements.

Finally, as part of assessing compliance, the implementing agency needs to decide how to deal with violations. Whatever the decision, the plan for each implementing agency should be

internally consistent and should include pollution prevention options. For this rule, compliance assistance is not generally advised because there is a period of two and half years to prepare for the requirements. As stated in phase three, affected sources should be encouraged to investigate alternative sterilization techniques. Some area sources or small businesses may be granted some assistance if they have trouble establishing initial compliance, such as an opportunity to re-test.

**Phase Five - Enforcement**

Notwithstanding any discussion of compliance assistance, the implementing agency should proceed with enforcement of violations involving an exceedance of an emission limit or a failure to conduct monitoring. The agency may use its enforcement discretion regarding a single reporting omissions, such as failure to submit timely an initial notification or a compliance certification notification, provided prompt correction is made. Enforcement is appropriate for repeat omissions involving any standard.

Since this rule regulates area sources, the regional offices should consider using field citations for violations that merit an action. This would simplify the process for the source and EPA. Also, whenever a SEP is considered as part of an enforcement case settlement, pollution prevention activities should be encouraged.

**Phase Six - Additional Activities**

One of the major ancillary activities will involve the permitting of the sources. All sources other than those using less than one ton of ethylene oxide are required to obtain a Title V permit. The permit must contain:

1. the requirement for the initial notification;

2. the emission standards for sterilization chamber vents, aeration room vents, and chamber exhaust vents;

1. the compliance date for each emission point;

2. the performance test requirement for each vent;

3. the requirement for the notification of compliance status;

4. the monitoring requirements;

5. the reporting requirements; and

6. the applicable General Provisions.

Many of these requirements are highlighted in the regulation summary section at the beginning of this report.

With respect to the General Provisions, the permit may reference the General Provisions without restating each minute section or may explicitly state each portion. The implementing agency should be advised that explicitly including all requirements in the General Provisions will result in a larger permitting effort. Also, many times the General Provisions include options. To address the options, the permitting agency must answer the following: does the permit contain all options, growing even larger, or does the permit only contain the options appropriate for the source? If the latter is used, the permit may have to be reopened every time a source switches options. Regardless of the technique used to include the General Provisions, the reference table within the regulation is an excellent guide between the two options.

For area sources, the Title V permitting requirement has been deferred for five years from the approval of a state's Title V program. These source must submit their permit application within 12 months of the expiration of the deferral period.

Other additional activities include processing of special requests: compliance extensions, performance test waivers, etc. Sufficient resources should be allocated to cover the processing of these requests. For this rule, such requests should not be excessive. However, there will be performance tests for multiple emission points for each facility, and these results will need a review. An implementing agency should anticipate most of these test results beginning in June 1998 and ending in August 1988.

**Reference Materials**

The following list contains reference materials for this rule and their location.

- Background Information Document (BID), TTN - Clean Air Act Board, Title III Section etc.

# APPENDIX G

# Source Identification Cookbook

# ENABLING DOCUMENT

# SOURCE IDENTIFICATION PROCEDURES FOR SOURCES SUBJECT TO REGULATIONS UNDER SECTION 112(d) OF THE CLEAN AIR ACT AS AMENDED IN 1990

Developed in Cooperation with
US Environmental Protection Agency
(Region 4, OAQPS, & OECA)
State of Georgia
State of New York
State of Florida
State of Illinois

[ PLEASE REVIEW AND SUBMIT ALL WRITTEN COMMENTS BY OCTOBER 14, 1996. WRITTEN COMMENTS SHOULD BE MAILED TO:

ANTHONY TONEY
U.S. EPA REGION 4
APTMD
ATLANTA FEDERAL CENTER, 12th FLOOR
100 ALABAMA STREET, N.W.
ATLANTA, GA 30303

# TABLE OF CONTENTS

**Section** **Page**

# TABLE OF CONTENTS (Continued)

**Section** **Page**

## ACKNOWLEDGMENT

This document was prepared by the U.S. Environmental Protection Agency as a result of Brown Summit II, April 10-12, 1995, in North Carolina. This document is the result of a joint effort of the following workgroup: Anthony Toney, Linda Anderson-Carnahan, USEPA Region 4; John Schaefer, EPA OAQPS; Jeff Kenknight, EPA OECA; Susan Fields, Nebraska Department of Environmental Quality; Jimmy Johnston, Art Stelson and Cindy McAlpine, Georgia Environmental Protection Division; Mary Sullivan Douglas, STAPPA/ALAPCO; Hank Naour, Illinois EPA, Bureau of Air Quality; Sarah Laumann, Colorado Department of Health; John Glunn and Alex Meng, State of Florida Department of Environmental Protection; Thomas Gentile and Barbara Nuffer, New York State Department of Environmental Conservation.

EPA would like to thank all individuals that contributed their efforts toward the development of this project. Your assistance is duly noted and appreciated.

## NOTICE

This document has been reviewed in accordance with U.S. Environmental Protection Agency policy and approved for publication. Mention of trade names or commercial products does not constitute endorsement or recommendation for use.

# 1.0 INTRODUCTION

## 1.1 Purpose

The primary purpose of this document is to provide State and local environmental regulatory agencies guidance for identifying and compiling a list of sources subject to regulation under section 112(d) of the Clean Air Act as amended in 1990. In general, this document contains guidelines and/or procedures on suggested activities which can be undertaken to identify such sources subject to maximum available control technology (MACT) standards. Use of this document will facilitate the efficient implementation of all MACT standards and ensure the level of environmental protection mandated by the Act. The document assumes a general knowledge of title III of the Act and the promulgated regulations thereto. Readers not familiar with these programs should refer to the sections mentioned in the "Background" and to the General Provision for MACT implementation, 40 CFR 63, Subpart A. This document should clarify typical questions regarding source identification and should help facilitate the development of comprehensive lists of affected facilities. As we learn more through the actual process of source identification, this document will be revised accordingly. It is hoped that this document becomes an evolving, "living document" that will experience continuous improvement through the fine tuning of the source identification process.

## 1.2 Background

Critical to an agency's success in limiting hazardous air pollutant emissions is its ability to identify sources subject to MACT standards. Listings of specific sources subject to MACT or procedures that can be used to identify sources within a jurisdiction are necessary for a number of reasons. The resources required of a regulatory agency to implement a standard will be a function of the number of sources subject to the MACT. Further, because some sources will not be required to obtain a title V permit, state and local agencies willing to oversee implementation of such standards for non-Part 70 sources need to be able to gauge the resources required in order to

make a commitment. Finally, sources must be easily and quickly identified to facilitate the transfer of information on new standards.

During an April 1995 meeting of EPA OAQPS, OECA, OGC and Regional Offices with State and Local air program representatives (Brown Summit II), one of the action items identified included the development of a standard method to identify sources subject to MACT standards. The workgroup convened on this action item envisioned the development of a "cookbook" for this process.

## 1.3 MACT Implementation Schedule

With the promulgation of each MACT standard, there are several administrative actions which must be undertaken in a relatively short time-frame. These requirements dictate the need for a comprehensive listing of subject sources. A comprehensive listing of subject sources will ensure the proper allocation of resources by the implementing agencies. Although MACT requirements will vary depending on whether a source is an existing, new area or new major facility, the main events for a facility subject to MACT standards (primarily major sources) are listed below:

1. Source submits an initial notification no later than 120 days after the effective date of a relevant standard.

2. Source submits a notification at least 60 days before conducting a performance test; at least 30 days before conducting opacity and visible emission observations.

3. A source submits a notification of compliance status within 60 days after the performance test.

The above listed activity deadlines may be overridden by the specific requirements listed in an individual MACT standard.

## 2.0 MACT SOURCE IDENTIFICATION PROCESS

Ideally, in the process of developing a MACT for a source category, EPA will attempt to identify all of the subject facilities in the process of gathering information for the standard. It is anticipated that specific information (i.e., names and addresses) on subject sources will eventually be made available by EPA on an electronic database. Unfortunately, a survey of MACT development project leaders suggests that a complete listing of sources has not and will not be available in many cases. Furthermore, state and local agencies have sometimes found that lists provided by EPA can be inaccurate, incomplete or outdated. Although this document will be applicable to all MACT source categories, we have initially identified two generic groups of hard to locate sources to which this document will predominantly apply: 1) small, numerous sources (e.g., dry cleaners); and 2) co-located sources (e.g., halogenated solvent cleaning operations). Appendix A contains a listing of the MACT categories and identifies those standards for which a complete list of subject sources will likely not be available from EPA. The table also contains the anticipated SIC codes for the source category, the estimated number of subject facilities, their trade associations, and whether the sources are expected to be collocated in other source categories.

Contained in this section are procedures which can be used to assist in the identification of sources potentially subject to MACT standards. The procedures outlined in this section should provide the most effective mechanism for source identification. The initial steps of the following source identification procedure are designed to provide a comprehensive list of sources potentially subject to the standard in question. Subsequent steps in the source identification process will serve to narrow down the list to the sources most likely to be subject to the standard. This series of steps has been constructed so that at any time during the source identification process, if the implementing agency feels comfortable that the list is adequate and sufficient, the agency may decide that it is more efficient to contact all sources identified as opposed to taking additional steps to narrow down the universe. Implementing agencies may wish to perform the various steps as they deem appropriate given the nature of the source category and the agency's available resources (i.e., it may be appropriate to omit early steps and perform the later steps).

While EPA does not have access to all information necessary to assist in identifying every affected source, this document contains a prioritized list of resources which could greatly enhance the process of source identification. Because many of the resources available to state and local agencies use the Standard Industrial Classification (SIC) codes to identify facilities, the first and primary step in the identification process is to compile a list of potentially applicable SIC codes. A partial listing of SIC codes may be obtained from Appendix A and/or the Background Information Documents (BID) for each source category as identified by Project Number in Appendix D. During the standard development process, EPA attempts to identify a list of facility SIC codes in which the processes subject to the MACT may be located. This information is made a formal part of the BID and is maintained as a part of the docket for each respective MACT standards. However, the list of SIC codes identified may not be comprehensive because the facilities operating within each particular source category type are not specific to that one manufacturing process. In the initial stages of MACT development, OAQPS & ORD Environmental Criteria and Assessment Office make every effort to generate a listing of potential sources subject to standard. After the proposal, information from the docket may be secured from each respective MACT project lead. A list of the current MACT project leads has been

included as Attachment D of this document. After the MACT standard has been proposed, the docket information may be obtained from the EPA Docket Center or the OAQPS MACT project lead. As previously mentioned, it is hoped that OAQPS will eventually make the list of sources identified for each MACT available through an electronic bulletin board system. Such a system would also allow users to share additional information on source identification techniques as well as outreach materials developed by different agencies.

Source identification will usually be a multi-step process which may include the following activities: (1) development of a list of potential sources; (2) determining which sources are actually employing the regulated process/equipment or emit the hazardous air pollutant (HAP); and (3) determining which sources are potentially major, those that will probably seek synthetic area status, and those which are area sources. The reliability of these listings can be greatly enhanced through the use of databases, correspondences/dialogue with possible sources, site visits, agency knowledge and expertise, etc. Throughout the identification process, the implementing agency should review the generated lists and determine their usefulness. If a list consists of numerous sources which are obviously not subject to the specific standard, that particular database may not be appropriate for this process. This situation may occur when the SIC code is too broad. The recommended activities and/or resources for identifying sources are listed below:

## 2.1 Step 1

The EPA will make every effort to provide as much information on specific sources as possible. The EPA will distribute (or make reasonably available) to each Regional Office the source identification information obtained during the standard development process. Each Regional Office will in-turn disseminate information to the respective implementing agencies. Using these lists and the information in this "cookbook", each agency should review the information to determine if any additional identification activities are warranted. Additionally, as a result of another Brown Summit II action item, EPA is working with state and local agencies to

develop an interactive, electronic bulletin board system to disseminate and receive information on section 112. It is anticipated that a list of identified sources subject to each MACT standard, by state, will be available on this system.

Starting with the list of facility SIC codes in which the processes subject to the MACT may be located (and any additional information available from the EPA), there are a number of databases and information sources that can be used to locate the names and addresses of potentially subject facilities. Lists developed from the following databases should be cross-checked against each other to enhance the level of accuracy of the final product, to better define actual functions of facilities (users vs. Sellers), and to eliminate duplicitave listings from the final list. Outlined below is a listing of such databases and/or resources:

### 2.l.1 State/County/Local Business License Processes

Within each state, county, or local governmental structure, there should be an entity responsible for issuing business licenses. These agencies should have the capacity to download information via a computer based on SIC codes or facility types and provide a list of facilities potentially subject to a specific MACT standard, including names and mailing addresses. These resources are usually housed within the Revenue and License Departments. Generally, there is a service charge for the compilation of this information.

### 2.1.2 County & City Chamber of Commerce

Chambers of Commerce offices have the capability of supplying a listing of facilities within their jurisdictions or memberships that fall within specified SIC categories. These offices may be contacted as to the specific procedures one must follow. There maybe a fee for such services in some areas.

### 2.1.3 Regional Telephone Directory (i.e., WinPhone, PhoneDisc '95, etc.)

This directory provides a comprehensive listing of all businesses which serve in some capacity, e.g., sales, manufacturing, repair, etc., under the respective SIC codes. The list is not always reliable because many listed organizations are not producers or users of the HAPs. Additionally, the source's operations (e.g., name, location) may have changed, reducing the accuracy of the information. One can specify the business type by either its SIC code or by selecting a key word or phrase. A word of caution, the address provided by this database is the physical location, not the mailing address. Telephone directories of this type may generally be obtained from any retail store that sells software packages, e.g., Office Depot, Best Buys, Compuworld, etc. PhoneDisc is a common brand name that is generally available. Additional information on PhoneDisc can be obtained by calling 1-800-284-8353 or (617) 639-2900.

### 2.1.4 Databases of Corporate Affiliations (e.g., Business Dunn and Bradstreet)

Database software systems such as Dunn & Bradstreet contains a vast amount of useful business information. Included in the database are parent companies headquartered in the United States and their subsidiaries, affiliates, and joint ventures. Dunn and Bradstreet offers an easy way to identify facilities (name and location) and corresponding information such as type of business and contact persons, based on various forms of facility identification information, including SIC codes. With Dunn and Bradstreet, one can enter the SIC code or type of business and generate a listing of facilities within the database that are compatible with the specific search parameters. Additionally, Dunn and Bradstreet publishes a multi-volume Directory of Corporate Affiliations which is the hard copy form of the Dunn and Bradstreet CD ROM version. These type software packages may be obtained at various local retail computer software stores (Dunn and Bradstreet database system can be obtained by contacting 1-800-234-3867).

### 2.1.5 Department of Industry & Trade/Commerce

Within each state's governmental structure, the State Department of Industry and Trade or Commerce has the capability of compiling an annual listing of all manufacturing facilities operating during that fiscal year. The sources can be identified by SIC or facility type. A copy of this publication can be obtained through the respective state's Industry and Trade or Commerce office. The fee for this directory is generally less than $100.00.

## 2.2 Step 2

To better refine the list of potential sources generated from the various databases, each agency should then, to the extent possible, verify the list using the resources listed below which should have available a more reliable list of known and currently operational facilities.

### 2.2.1 State Department of Revenue

By canvassing the data sources above, a comprehensive list of potential-subject sources may be generated. However, these references may not be completely up to date. A cross check against recent annual taxation records may serve to narrow the list to currently operating facilities.

### 2.2.2 State and Local Agency Resources

Within each state and local agency there exists a wealth of knowledge relating to the location, operation, and existence of sources located in the jurisdiction of the implementing agency. Such in-house resources include: Enforcement staff, Small Business Assistance Program, State.

Pollution Prevention Assistance Programs, State/Local Municipal Waste Treatment Programs, state and local emission inventories, etc. Both staff and program documents may

provide valuable leads and timesaving information. The Emission Inventory Development Guidance published by EPA can serve as a valuable resource in the identification of sources.

### 2.2.3 Toxic Release Inventory

It may be possible for regulatory agencies to further refine the list of potential sources subject to a MACT through the use of the TRI database. Using the HAPs targeted by the MACT for subject facilities, a cross check of the list generated by the above steps against a TRI list of facilities with air emissions of targeted HAPs may reveal companies that are less likely to be subject to the standard, regardless of their SIC code. One drawback of TRI is that many industries/sources are exempt from its requirements. Also, TRI does not cover all HAPs. The TRI database may be used to identify covered sources missed in steps 1-7. In this case, a list of sources filing TRI reports of major emissions of the targeted HAPs is reviewed. This technique may be especially useful when attempting to identify co-located MACT sources. (See Section 2.1 below)

### 2.2.4 EPA's RCRA Hazardous Waste Disposal Notification Database

This database provides a cross-media search function for facilities which are currently regulated by EPA. Searches within this database may be performed using specific facility information such as SIC codes, chemical names, chemical releases, etc. Regulatory agencies can manipulate this database to refine the list generated from steps 1-8 in the same way that the TRI database is used.

## 2.3 Step 3

The following are additional resources that can be consulted for information on subject sources. In many cases, it may not be possible to secure facility names and addresses from these sources. However, these entities may be amenable to performing various outreach efforts and

distributing information pertaining to the rules (e.g., source applicability and notification forms). If it is possible to secure a list of facilities from these sources, agencies may wish to utilize this approach rather than to rely on SIC codes to develop a list of subject sources.

### 2.3.1 Industry Representatives

One resource often overlooked is industry experts themselves. When contact is made with a source owner, operator, or environmental officer, much useful information may be obtained. It is important that an agency representative present such a request as an effort to help potentially covered sources get the information they need to achieve compliance. Such a request might be presented in this way: "Do you know of anyone else that might be subject to this rule? I'd like to get the information out to everyone so they'd have as much lead time as possible to consider the implications of the rule."

### 2.3.2 Trade Associations

Regulatory agencies can solicit from national, regional or state associations, lists of members which identify location and contact personnel for the facilities, or at a minimum, a list of industry types which may be subject to the particular MACT standard. Trade associations providing state and local agencies with a list of potentially subject facilities for outreach purposes may benefit by increasing membership through offering meetings at which EPA makes presentations on MACT standards. Implementing agencies also have the opportunity to publish articles, notices, or announcements in trade journals for the affected industries. Although developed by and for the State of Wisconsin, Attachment G contains a list of trade associations generally located in each state which are related to various MACT categories.

### 2.3.3 Equipment & Raw Material Suppliers/End Product Users

Suppliers of raw materials (e.g., chlorinated solvents) and users of end products may provide an additional resource of information on sources subject to MACT standards. Agencies should contact the users or distributors of specialty products, materials, chemicals, or any raw materials used in processes which are subject to MACT regulation, in an effort to obtain information on the types of facilities, known users, etc.

## 3.0 COLLOCATED SOURCES

For many Part 63 standards, the regulated process is a small part of an overall manufacturing process (i.e., degreasers, cooling towers, etc.). In these cases, the primary SIC code of the facility in which the processes are located may be chiefly indicative of the primary manufacturing process, rather than possible subordinate activities. For such collocated sources, the databases and information resources listed in steps 1-6 may fail to generate a comprehensive list of sources comprising the regulated activities. Therefore, additional efforts may be required to generate an accurate list of the most likely collocated sources.

First and foremost, collocated HAP sources are for the most part located at major HAP sources. Such sources, because they are major, will be required to obtain title V permits, and usually, will be required to file annual emission inventories to support the title V fee assessment. This mechanism can be utilized both directly and indirectly.

By working with the title V and emission inventory staff, the Title V permit application and annual emission inventory forms can be crafted to directly identify activities which are routinely collocated, such as degreasers, cooling towers or small boilers. For example, the form could include a question tied to to a positive report of halogenated organic compounds, such as "does the facility employ halogenated degreasing processes?" For collocation of other HAP-emitting activities subject to various actual or scheduled MACT standards, collocated activities may be identified indirectly, through review of the actual title V permit applications or annual emission inventories submitted by major HAP sources.

The permit application should identify all emission units responsible for emissions of regulated pollutants, and provide enough information to identify most activities subject to major MACT standards. If the application does not clearly indicate a source's status relative to other MACT standards, HAPs reported in the annual emission inventory may suggest that collocation may be involved.

An example of a collocated source could involve chromium electroplating collocated with miscellaneous metal parts and products (surface coating) or reinforced plastics composite production (the primary activity identified by the facility SIC code). Chromium electroplating is often associated with metal parts manufacturing which is included in several surface coating source categories, and could easily be distinguished from galvanizing (which is not included in a listed source category) in the operating permit application itself. On the other hand, chromium electroplating is less common at facilities involved in reinforced plastic composite production, but would be suggested by chromium emissions reported in the annual emission inventory.

To obtain a greater sense of reliability, the list of sources identified through these activities may be refined through various outreach efforts including mail-outs or questionnaires to verify their status relative to suspected source categories. The level of effort expended by this process will be governed by agency confidence in the quality of the list at this stage, as well as available resources.

## 3.1 Collocation, Federally Enforceable Limits, and PTE Policy

In a memorandum dated May 16, 1995, from John Sietz, Director, EPA, OAQPS, relating PTE timing issues, the applicability of MACT for collocated sources was presented. In brief, the memo states that if a facility contains equipment or processes included in multiple source categories, it is possible that after application of the initial MACT or an earlier MACT standard reducing the HAP PTE, the status of the source relative to the remaining source categories may be changed. If compliance with a MACT standard revises a facility's PTE to a level below major source thresholds, the facility would not be subject to subsequent major source MACT standards.

Additionally, the memo indicates that a facility may elect to take federally enforceable limits to lower its PTE below major source thresholds, thereby avoiding the applicability of major MACT standard(s). This option is available to covered sources up until the first compliance date in **each** major MACT standard. Therefore, a source subject to multiple MACT standards might

avoid the applicability of all standards by limiting its source-wide PTE before the first compliance date in any of the standards.

Voluntary federally enforceable limits may also be taken by a source subject to multiple MACT standards when compliance with a given standard or standards does not sufficiently reduce the source's PTE. Such a HAP source may avoid coverage under subsequent standards by taking additional voluntary federally enforceable limits until its source-wide PTE is below the major source threshold, provided that the limits are taken before the first compliance date in each of the standards it wishes to avoid.

Neither of these scenarios would relieve the facility from the applicability of those MACT standards whose initial compliance date passed before the necessary reductions in PTE were achieved. This "once major, not always major" policy is expected to reduce the burden of MACT standards on collocated sources. However, the policy does complicate the identification of sources subject to major source MACT standards, particularly if those standards are promulgated within a relatively short time. In situations such as these, agencies may wish to identify sources which have equipment or processes covered by the MACT standard as an initial step, and subsequently determine major source applicability through additional correspondence or outreach.

# 4.0 RESULTS OF PILOT TESTING FOR EXISTING MACTs AND STATE GENERATED LISTS

A number of states pilot tested the MACT identification approaches using lists of sources previously generated by the regulatory agency for existing MACT standards for comparison. The following section documents the findings of these pilots.

## 4.1 State of New York MACT Source Identification Pilot Study

### 4.1.1 CD-ROM Databases

CD-ROM databases can be a valuable resource for identifying businesses in specific industries. These businesses can be sorted by SIC (Standard Industrial Classification) codes or Yellow Page headings. These databases can be used to create mailing lists of sources who may be subject to regulations under Section 112(d) of the Clean Air Act as amended in 1990.

The best place to start a search for these databases is in your state library. The New York State Library has a business CD-ROM database available for use by New York State employees. We have used this resource extensively to explore the potential for creating source lists and discovered positive as well as negative features. Other databases have been located but not researched and will be listed as potential resources. Most of these databases are available on a trial basis before purchase for your own research, and we recommend that this be done.

We tested the American Business Disc (ABD), from American Business Information, Inc. (1-900-555-5211). The following information is contained on the disc:

1. Company name
2. Address
3. Phone number

4. Number of employees
5 . Estimated sales volume
6. Credit rating code
7. SIC code
8. Line of business description

You can perform the following searches:

1 . Geography- city, state, ZIP code, county or total U.S.
2. Company name
3. Yellow Page keyword
4. SIC code
5. Employee size range
6. Sales volume

Although you can download or print these records this can only be done for 50 records at a time. The company will prepare more extensive lists for you for a fee. Since some of our lists were in the 2,000 sources range, this was a major problem.

We extensively researched two industries with source lists previously compiled from other databases, chromium electroplaters and wood furniture manufacturers, to cross check the capability of the ABD to reproduce a similar list. These two searches were analyzed separately.

### 4.1.2 Chromium Electroplaters

It is impossible to sort out chromium electroplaters from general electroplaters based on either SIC codes or Yellow Page keywords. We used the SIC code for Electroplating, Plating and Polishing 3471. We found 268 sources in New York State using the ABD database, 178 sources were identified using the New York State Department of Labor (DOL) list of SIC

code 3471. The New York State Department of Environmental Conservation (DEC) currently has 111 chromium electroplaters permitted in New York State. Only 67 of these 111 sources were found on the ABD.

We have also cross-checked our permit information on chromium electroplaters with notification forms received by the USEPA Region 2 Office. This cross-check indicated more direct outreach to NESHAP affected sources is needed. The Region 2 list also identified 11 additional platers who were not found in our current permit system. However, 8 of these 11 were listed on the ABD.

The ABD did not prove to be totally inclusive, but it contained more sources than the DOL listing. Attachment F is a list generated using the ABD as well as a printout of a detailed look at a specific business.

### 4.1.3 Wood Furniture Manufacturers

A useful resource to identify SIC codes to use for searches is contained in EPA's Sector Notebook on the Wood Furniture Industry. Page 5 contains a listing of the codes to use for the wood furniture manufacturing industry. The codes identified are 2511, 2512, 2517, 2521, 2531, and 2541 are as follows:

| | DOL | ABD |
|---|---|---|
| SIC CODE | Number of Sources Identified | |
| 2511 | 178 | 69 |
| 2512 | 43 | 30 |
| 2517 | 5 | 6 |
| 2521 | 43 | 28 |
| 2531 | 11 | 32 |

| SIC CODE | DOL | ABD |
|---|---|---|
| | Number of Sources Identified | |
| 2541 | 102 | 66 |
| TOTAL | 382 | 231 |

This comparison is not very impressive for the ABD list. However, SIC codes are frequently listed incorrectly on the DOL listings and since this particular industry has a large number of similar SIC codes, the number of businesses could be due to inaccuracies in the assignment of SIC codes.

We identified 21 sources on our DEC list of permitted facilities who were most likely to be subject to the wood furniture NESHAP. We found 13 of the sources on the ABD.

One problem with searching by company name is that if you have any misspellings or incorrect names you cannot find them on the ABD. Our permitted sources' names are not always 100% accurate or the names may have been changed slightly. These possible discrepancies may also explain the low number for this count.

### 4.1.4 Conclusion

As you can see from these two very different analyses, the ABD has proven useful but not foolproof. A listing of permitted sources from your state agency is the best place to start to locate specific industries. However, we know that these lists are not complete and it is useful to have a resource to create listings based on SIC codes or Yellow Page keywords. This database is very useful when you want to do a search of businesses based on the number of employees (e.g., to target small businesses who would be eligible for the Small Business Stationary Source Technical and Environmental Compliance Assistance Programs that are located in each state, as mandated by the Clean Air Act). Also, you can search by sales volume and determine the largest businesses, which may produce high emissions. Accuracy of company names is a must when

using this database. The biggest problem with the ABD is the ability to download only 50 sources at a time.

### 4.1.5 Other CD-ROM Databases

***Harris Publishing's New York Manufacturers Directory (1-800-888-5900).*** These editions are available for other states. The information provided includes: company name, address, phone and fax numbers, and SIC codes. It is available as a book or in DOS or Windows versions on diskette or CD-ROM. The cost varies depending on the size of your state. Demonstration diskettes are available.

***American Business Information's American Yellow Pages (1-800-555-5666).*** This database is for the United States. It includes Yellow Page headings and company names. It is available on CD-ROM and you can perform searches by company name and Yellow Page headings. You can download to many label formats to create mailings.

***DDA PhoneDisc Business 95***. This product was found in the catalog "Windows Warehouse." The information provided includes: company name, business type, address and phone number. Searches can be done based on each of these items.

## 4.2 State Of Georgia Halogenated Solvent Cleaning Machine Pilot Study

### 4.2.1 Introduction

A pilot study was initiated for EPA Region 4 by the State of Georgia's Environmental Protection Division to explore methods of locating MACT Standard or NESHAP affected facilities. The particular MACT Standards chosen for the pilot test were 40 CFR Part 63, Subpart T, Halogenated Solvent Cleaning Machines, commonly called the Degreaser Standard. Three approaches were explored:

1. Locating sources using the SIC code list supplied with the MACT Standard and the ProPhone phone directory.

2. Locating sources using the SIC code list supplied with the MACT Standard and the Georgia Manufacturing Index.

3. Locating sources using ProPhone and the SIC codes from sources submitting Initial Notifications for the MACT Standard.

### 4.2.2 Study and Results

Using ProPhone and the Georgia Manufacturers Index (GMI), we were able to identify matches for two SIC codes (3442 and 3691) contained in the MACT Standard. ProPhone had 27 matches for SIC code 3442 and 124 matches for SIC code 3691. GMI had 64 matches for SIC code 3442 and 12 matches for SIC code 3691. Of the identified sources from GMI and ProPhone, none were on our Initial Notification list. When the listings were reviewed by inspectors, they indicated that none of the listed sources had degreasers. When compared to our State listing, we found one additional source which had failed to report their existence due to an oversight. When attempting to locate degreasers based on the list of SIC codes of reported degreasers, the list from ProPhone and GMI expanded to more than 3,000 facilities which is the opposite trend we anticipated. Thus, we concluded that the procedure we initially used, which was to send every source in the GMI a degreaser informational packet, was the most effective method to insure proper notification of every source in Georgia.

### 4.2.3 Conclusions

In conclusion, we found the SIC code list from the MACT Standard, the GMI, and ProPhone directories did not adequately locate degreasers or halogenated solvent cleaning machines in Georgia. In addition, we were only able to locate one additional source by actual inspection of the facilities and that source failed to notify us by oversight. Thus, we conclude that the initial approach we used, mass mailing, was the most effective in publicizing the MACT

Standard and getting sources to report the existence of halogenated solvent cleaning machines. The additional paragraph on collocated sources is included for additional insight.

### 4.2.4 Collocated Sources

One problem facing state regulators is the identification of collocated sources. To give insight into this problem, we chose two related MACT Standards and made a list of sources reporting both affected processes. The MACT Standards we chose were halogenated solvent cleaning machines (40 CFR Part 63 Subpart T) and chromium electroplaters (40 CFR Part 63 Subpart N).

| Source | Location | SIC Code |
|---|---|---|
| Delta Airlines Technical Operations Center | Atlanta, GA | 4512 |
| Hercules Automotive Products, Inc. | Pelham, GA | Unknown |
| Lockheed Systems Company | Marietta, GA | 3721 |
| Northwest Airlines Technical Operations | Atlanta, GA | 4512 |
| Robins Air Force Base | Robins AFB, GA | 9711 |
| Roper Pump Company | Commerce, GA | Unknown |

As indicated in the sample above, with the exception of the majority of sources seemingly being related to the aerospace industry, there isn't any particular trend indicating the collocation of these processes. Thus, one could conclude that the locating process for these MACT Standards would require individual searches for these processes. Lastly, the presence of one process at a facility would not necessarily indicate both are present onsite.

### 4.2.5 Wood Furniture Cookbook

The same procedures were conducted on the Wood Furniture MACT. Using the GA Manufacturers Index, there were 465 sources identified. The WinPhone'96 database contained 950 sources with 85 duplicates within database. When comparing the two databases, there were

194 sources identified in Winphone that were also contained in the GMI database. However, GMI had more complete data on sources. Sources potentially subject to the wood furniture standard were listed in SIC codes: 2434, 2511, 2512, 2517, 2519, 2521, 2531, 2541, 2599, and 5712. SIC Code 5712 included manufacturers & retail stores. Code 5712B is manufacturers of custom furniture. The other 5712's (A, C, etc) were retail stores, for which there were thousands of listings. Those listed as only 5712 were included in our reporting, although, this approach may have inadvertently included some retailers. The GMI database was seemingly was incomplete. USEPA's AIRS database had only 5-6 sources. A survey of major and synthetic minor sources only identified a few facilities. All of which were contained on GMI and/or WinPhone.

## 4.3 Florida Source Identification Pilot Study

Over the last year, the Florida DEP and the Florida Air Toxics Work Group, composed of district and county air program staff, have worked together to develop a mechanism for identifying facilities potentially subject to upcoming MACT standards. This database, known as TINS, or the Toxics Inventory System, is about to become fully functional and will play a role in Florida's efforts to locate and outreach to facilities which may become subject to new federal air rules.

The TINS database is a stand alone subpart of the Department's oracle Air Resources Management System (ARMS) database and can be accessed through the same procedures. TINS will contain information about facilities which may be subject to upcoming rules, and therefore the files will remain separate from the ARMS system. However, when a qualified user provides the TINS database with the information that signifies that a TINS facility is subject to a promulgated rule, the TINS facility file will be transferred to ARMS and thereafter directly available through the ARMS database.

The TINS database uses publicly and commercially available industry databases such as the Directory of Florida Industries, the Toxics Release Inventory, and others to generate files of

facilities that may be subject to an upcoming or recently promulgated rules. A form letter can be automatically generated which identifies the MACT rule, its applicability, the initial notification requirements and the address of the agency to receive the facility's notification form.

When a new or proposed MACT is issued, it is anticipated that the Department's Air Toxics Section will develop the initial TINS facility identification files from an available industry database and generate letters to the facilities informing them of the rule applicability and notification requirements. Districts and local program staff may also review the TINS if, to their knowledge, additional facilities exist that may be subject to the rule, enter the necessary facility information and generate letters to those facilities.

After an affected facility sends an initial notification to the appropriate permitting agency, the agency staff can enter a code in a TINS screen that indicates that the facility is subject to the promulgated rule. When this occurs, the facility's file is transferred to the ARMS database and the facility is subsequently tracked as a regulated facility. TINS can also generate reports, such as identified facilities, returned notifications and MACT affected SIC codes.

The TINS database was developed primarily to help with identifying small area sources such as vapor degreasers and chrome electroplaters that are subject to recently promulgated MACT standards. We recognized that ARMS may not have records of these facilities, and they may not be covered by the Toxics Release Inventory either. A versatile, yet simple computer program was needed that could utilize various industry databases to identify these smaller operations.

As the list of candidate general permits continues to grow and the Department searches for ways to make suitable facilities aware of this permitting mechanism, it may be feasible to use the TINS database as a means for targeting appropriate facilities and for sending fact sheets to the facility's address. The TINS database is navigated using the same commands as the ARMS database and can be learned rather quickly.

Appendix C contains replicas of the computer screens in TINS and the directions for its intended users. A sample form letter that can be generated from TINS is also attached. For more information about the design and use of the TINS database, please call John Glunn at (904) 488-0114. To learn more about the functional properties of TINS or for programming information, please call Alex Men at the same number.

## 4.4 Illinois Environmental Protection Agency (IEPA)

IPA has used a number of cookbook elements in determining the NESHAP effected sources in Illinois; the top four sources are D&B, Department of Revenue for both the State and Chicago, Department of Commerce, and Trade Associations;

These four resources supplemented our standard database (IEPA files, title V data, state permitting data, AT telephone CD-ROM data) and resulted in significant increases in "hits" for potential effected sources.

For the Dry Cleaning standard, the Allied Trade Associations resulted in an additional 260 Dry Cleaning sources for consideration; the Chicago Dept. of Revenue added an additional 10 chrome electroplaters; and the State DAR resulted in an additional 2400 solvent cleaning "hits."

IPA is reviewing the CD-ROM telephone directory the Cookbook highlighted and is expected to establish Agency-wide access to the database.

One of the better sources has turned out to be the Allied Trades Associations. The solvent cleaning suppliers have also been very cooperative in working with us and their customers in learning about the standard and understanding the reporting and control requirements.

# APPENDIX A

# APPENDIX B

## FUEL COMBUSTION

| Category | Promulgation |
|---|---|
| Industrial Boilers | 11/15/2000 |
| Institutional/Commercial Boilers | 11/15/2000 |
| Process Heaters | 11/15/2000 |
| Stationary Internal Combustion Engines | 11/15/2000 |
| Stationary Turbines | 11/15/2000 |

## NON-FERROUS METALS PRODUCTION

| Category | Promulgation |
|---|---|
| Secondary Lead Smelting | 11/15/94 |
| Primary Aluminum Production | 11/15/97 |
| Primary Copper Smelting | 11/15/97 |
| Primary Lead Smelting | 11/15/97 |
| Secondary Aluminum Production | 11/15/97 |
| Primary Magnesium Refining | 11/15/2000 |

## FERROUS METALS PROCESSING

| Category | Promulgation |
|---|---|
| Coke Ovens: Charging, Top Side and Door Leaks | 11/15/92 |
| Ferroalloys Production | 11/15/97 |
| Steel Pickling - HCl Process | 11/15/97 |
| Coke By-Product Plants | 11/15/2000 |
| Coke Ovens: Pushing, Quenching, and Battery Stacks | 11/15/2000 |
| Integrated Iron & Steel Manufacturing | 11/15/2000 |
| Iron Foundries | 11/15/2000 |
| Steel Foundries | 11/15/2000 |

## MINERAL PRODUCTS PROCESSING

| Category | Promulgation |
|---|---|
| Mineral Wool Production | 11/15/97 |
| Portland Cement Manufacturing | 11/15/97 |
| Wool Fiberglass Manufacturing | 11/15/97 |
| Alumina Processing | 11/15/2000 |
| Asphalt Concrete Manufacturing | 11/15/2000 |
| Asphalt Processing | 11/15/2000 |
| Asphalt Roofing Manufacturing | 11/15/2000 |
| Asphalt/Coal Tar Application - Metal Pipes | 11/15/2000 |
| Chromium Refractories Production | 11/15/2000 |
| Clay Products Manufacturing | 11/15/2000 |
| Lime Manufacturing | 11/15/2000 |
| Taconite Iron Ore Processing | 11/15/2000 |

## PETROLEUM AND NATURAL GAS PRODUCTION

| Category | Promulgation |
|---|---|
| Petroleum Refineries - Other Sources Not Distinctly Listed | 11/15/94 |
| Oil and Natural Gas Production | 11/15/97 |
| Petroleum Refineries - Catalytic Cracking (Fluid and Other) Units and Sulfur | 11/15/97 |

**LIQUIDS DISTRIBUTION**

| Category | Promulgation |
|---|---|
| Gasoline Distribution (Stage 1) | 11/15/94 |
| Organic Liquids Distribution (Non-Gasoline) | 11/15/2000 |

**SURFACE COATINGS PROCESSES**

| Category | Promulgation |
|---|---|
| Aerospace Industries | 11/15/94 |
| Magnetic Tapes (Surface Coating) | 11/15/94 |
| Printing/Publishing (Surface Coating) | 11/15/94 |
| Shipbuilding and Ship Repair (Surface Coating) | 11/15/94 |
| Wood Furniture (Surface Coating) | 11/15/94 |
| Auto and Light Duty Truck (Surface Coating) | 11/15/2000 |
| Flat Wood Paneling (Surface Coating) | 11/15/2000 |
| Large Appliance (Surface Coating) | 11/15/2000 |
| Manufacture of Paints, Coatings and Adhesives | 11/15/2000 |
| Metal Can (Surface Coating) | 11/15/2000 |
| Metal Coil (Surface Coating) | 11/15/2000 |
| Metal Furniture (Surface Coating) | 11/15/2000 |
| Miscellaneous Metal Parts and Products (Surface Coating) | 11/15/2000 |
| Paper and Other Webs (Surface Coating) | 11/15/2000 |
| Plastic Parts and Products (Surface Coating) | 11/15/2000 |
| Printing, Coating, and Dyeing of Fabrics | 11/15/2000 |

**WASTE TREATMENT AND DISPOSAL**

| Category | Promulgation |
|---|---|
| Solid Waste, Treatment, Storage and Disposal Facilities (TSDF) | 11/15/94 |
| Publicly Owned Treatment Works (POTW) Emissions | 11/15/97 |
| Hazardous Waste Incineration | 11/15/2000 |
| Municipal Landfills | 11/15/2000 |
| Sewage Sludge Incineration | 11/15/2000 |
| Site Remediation | 11/15/2000 |

## AGRICULTURAL CHEMICALS PRODUCTION

| Category | Promulgation |
|---|---|
| 2,4-D Salts and Esters Production | 11/15/97 |
| 4,6-Dinitro-O-Cresol Production | 11/15/97 |
| 4-Chloro-2-Methylphenoxyacetic Acid Production | 11/15/97 |
| Captafol Production | 11/15/97 |
| Captan Production | 11/15/97 |
| Chloroneb Production | 11/15/97 |
| Chlorothalonil Production | 11/15/97 |
| Dacthal (tm) Production | 11/15/97 |
| Sodium Pentachlorophenate Production | 11/15/97 |
| Tordon (tm) Acid Production | |
| 11/15/97 | |

## FIBERS PRODUCTION PROCESSES

| Category | Promulgation |
|---|---|
| Acrylic Fibers/Modacrylic Fibers Production | 11/15/97 |
| Rayon Production | 11/15/2000 |
| Spandex Production | 11/15/2000 |

## FOOD AND AGRICULTURAL PROCESSES

| Category | Promulgation |
|---|---|
| Baker's Yeast Manufacturing | 11/15/00 |
| Cellulose Food Casing Manufacturing | 11/15/00 |
| Vegetable Oil Production | 11/15/00 |

This comparison is not very impressive for the ABD list. However, SIC codes are frequently listed incorrectly on the DOL listings and since this particular industry has a large number of similar SIC codes, the number of businesses could be due to inaccuracies in the assignment of SIC codes.

| | |
|---|---|
| Acrylonitrile-Butadiene-Styrene Production | 11/15/94 |
| Butyl Rubber Production | 11/15/94 |
| Epichlorohydrin Elastomers Production | 11/15/94 |
| Epoxy Resins Production | 11/15/94 |
| Ethylene-Propylene Elastomers Production | 11/15/94 |
| Hypalon (tm) Production | 11/15/94 |
| Methyl Methacrylate-Acrylonitrile-Butadiene-Styrene Production | 11/15/94 |
| Methyl Methacrylate-Butadiene-Styrene Terpolymers Production | 11/15/94 |
| Neoprene Production | 11/15/94 |
| Nitrile Butadiene Rubber Production | 11/15/94 |
| Nitrile Resins Production | 11/15/94 |
| Non-Nylon Polyamides Production | 11/15/94 |
| Polybutadiene Rubber Production | 11/15/94 |

| | |
|---|---|
| Polyethylene Terephthalate Production | 11/15/94 |
| Polystyrene Production | 11/15/94 |
| Polysulfide Rubber Production | 11/15/94 |
| Styrene-Acrylonitrile Production | 11/15/94 |
| Styrene-Butadiene Rubber and Latex Production | 11/15/94 |

**POLYMERS AND RESINS PRODUCTION**

| Category | Promulgation |
|---|---|
| Acetal Resins Production | 11/15/97 |
| Amino Resins Production | 11/15/97 |
| Flexible Polyurethane Foam Production | 11/15/97 |
| Nylon 6 Production | 11/15/97 |
| Phenolic Resins Production | 11/15/97 |
| Polycarbonates Production | 11/15/97 |
| Reinforced Plastic Composites Production | 11/15/97 |
| Alkyd Resins Production | 11/15/2000 |
| Boat Manufacturing | 11/15/2000 |
| Butadiene-Furfural Cotrimer (R-11) Production | 11/15/2000 |
| Carboxymethylcellulose Production | 11/15/2000 |
| Cellophane Production | 11/15/2000 |
| Cellulose Ethers Production | 11/15/2000 |
| Flexible Polyurethane Foam Fabrication Operations | 11/15/2000 |
| Maleic Anhydride Copolymers Production | 11/15/2000 |
| Methylcellulose Production | 11/15/2000 |
| Polyester Resins Production | 11/15/2000 |
| Polymerized Vinylidene Chloride Production | 11/15/2000 |
| Polymethyl Methacrylate Resins Production | 11/15/2000 |
| Polyvinyl Acetate Emulsions Production | 11/15/2000 |
| Polyvinyl Alcohol Production | 11/15/2000 |
| Polyvinyl Butyral Production | 11/15/2000 |
| Polyvinyl Chloride and Copolymers Production | 11/15/2000 |

**PRODUCTION OF INORGANIC CHEMICALS**

| Category | Promulgation |
|---|---|
| Chlorine Production | 11/15/97 |
| Cyanuric Chloride Production | 11/15/97 |
| Hydrogen Cyanide Production | 11/15/97 |
| Sodium Cyanide Production | 11/15/97 |
| Ammonium Sulfate Production - Caprolactam By-Product Plants | 11/15/2000 |
| Antimony Oxides Manufacturing | 11/15/2000 |
| Fume Silica Production | 11/15/2000 |
| Hydrochloric Acid Production | 11/15/2000 |
| Hydrogen Fluoride Production | 11/15/2000 |
| Phosphate Fertilizers Production | 11/15/2000 |

| | |
|---|---|
| Phosphoric Acid Manufacturing | 11/15/2000 |
| Quaternary Ammonium Compounds Production | 11/15/2000 |
| Uranium Hexafluoride Production | 11/15/2000 |

**RODUCTION OF ORGANIC CHEMICALS**

| Category | Promulgation |
|---|---|
| Synthetic Organic Chemical Manufacturing | 11/15/92 |

**MISCELLANEOUS PROCESSES**

| Category | Promulgation |
|---|---|
| Commercial Dry Cleaning (Perchloroethylene) - Transfer Machines | 11/15/92 |
| Industrial Dry Cleaning (Perchloroethylene) - Dry-To-Dry Machines | 11/15/92 |
| Industrial Dry Cleaning (Perchloroethylene) - Transfer Machines | 11/15/92 |
| Chromic Acid Anodizing | 11/15/94 |
| Commercial Sterilization Facilities | 11/15/94 |
| Decorative Chromium Electroplating | 11/15/94 |
| Halogenated Solvent Cleaners | 11/15/94 |
| Hard Chromium Electroplating | 11/15/94 |
| Industrial Process Cooling Towers | 11/15/94 |
| Butadiene Dimers Production | 11/15/97 |
| Polyether Polyols Production | 11/15/97 |
| Pulp & Paper Production | 11/15/97 |
| Wood Treatment | 11/15/97 |
| Aerosol Can-Filling Facilities | 11/15/2000 |
| Benzyltrimethylammonium Chloride Production | 11/15/2000 |
| Carbon Black Production | 11/15/2000 |
| Carbonyl Sulfide Production | 11/15/2000 |
| Chelating Agents Production | 11/15/2000 |
| Chlorinated Paraffins Production | 11/15/2000 |
| Dry Cleaning (Petroleum Solvent) | 11/15/2000 |
| Ethylene Processes | 11/15/2000 |
| Ethylidene Norbornene Production | 11/15/2000 |
| Explosives Production | 11/15/2000 |
| Friction Products Manufacturing | 11/15/2000 |
| Hydrazine Production | 11/15/2000 |
| Leather Tanning adn Finishing Operations | 11/15/2000 |
| Marine Vessel Loading Operations | 11/15/2000 |
| Oxybisphenoxarsine/1,3-Diisocyanate Production | 11/15/2000 |
| Paint Stripper Users | 11/15/2000 |
| Photographic Chemicals Production | 11/15/2000 |
| Phthalate Plasticizers Production | 11/15/2000 |
| Plywood/Particle Board Manufacturing | 11/15/2000 |
| Rocket Engine Test Firing | 11/15/2000 |
| Rubber Chemicals Manufacturing | 11/15/2000 |

| | |
|---|---|
| Semiconductor Manufacturing | 11/15/2000 |
| Symmetrical Tetrachloropyridine Production | 11/15/2000 |
| Tire Production | 11/15/2000 |

**AREA SOURCE CATEGORIES**

| Category | Promulgation |
|---|---|
| Chromic Acid Anodizing (Area Sources) | 11/15/94 |
| Commercial Sterilization Facilities (Area Sources) | 11/15/94 |
| Decortive Chromium Electroplating (Area Sources) | 11/15/94 |
| Halogenated Solvent Cleaners (Area Sources) | 11/15/94 |
| Hard Chromium Electroplating (Area Sources) | 11/15/94 |

# APPENDIX C

# APPENDIX D

**Table D-1.**

| Project Title | Project Number | Project Lead | Phone Number |
|---|---|---|---|
| Acrylic/Modacrylic Fibers Production | 93/56 | Anthony Wayne | (919)541-5439 |
| Aerospace Coating MACT Standard and CTG | 91/67B | Jim Szykman | (919)541-4516 |
| Antimony Oxides Production NESHAP | 96/13 | Conrad Chin | (919)541-1512 |
| Architectural and Industrial Maintenance Coatings | 89/12 | Ellen Ducey | (919)541-5408 |
| Asbestos MACT/GACT Standard | 80/41A | Susan Zapata | (919)541-5167 |
| Asphalt Roofing and Processing NESHAP | 95/04 | Juan Santiago | (919)541-1084 |
| Baker's Yeast Manufacturing MACT | 94/13 | Anthony Wayne | (919)541-5439 |
| Boat Manufacturing Neshap | 95/15 | Madeleine Strum | (919)541-2383 |
| Case-by-Case MACT Database (Guidance Document) | 93/11 | Susan Zapata | (919)541-5167 |
| Chlorine Manufacturing NESHAP | 92/10 | Iliam Rosario | (919)541-5308 |
| Chromium Chemicals Manufacturing | 93/51 | Iliam Rosario | (919)541-5308 |
| Chromium Elecroplating MACT Standard | 85/02A | Lalit Banker | (919)541-5420 |
| Chromium Refractories Manufacturing NESHAP | 95/07 | Susan Zapata | (919)541-5167 |
| Coke By-Product Plants | 95/28 | Lula Melton | (919)541- |
| Combustion (Gas) Turbines NESHAP & NSPS | 95/10 | Sims Roy | (919)541-5263 |
| Consolidated Federal Air Rules | 95/25 | Richard Colyer | (919)541-5265 |
| Cyanide Chemical Manufacturing | 93/57 | Phil Mulrine | (919)541-5289 |
| Dry Cleaning MACT Standard | 85/06B | George Smith | (919)541-1549 |
| Electric Utility Air Toxics Study | 91/41 | William Maxwell | (919)541-5430 |
| Ferroalloy Industry MACT Standard | 91/45 | Conrad Chin | (919)541-1512 |
| Flexible Polyurethane Foam Fabrication Oper MACT | 96/10 | David Svendsgaard | (919)541-2380 |
| Flexible Polyurethane Foam Production | 93/49 | David Svendsgaard | (919)541-2380 |
| Hazardous Organic NESHAP (litigation) | 86/23 | Janet Meyer | (919)541-5254 |
| Hazardous Waste TSDF - RCRA Air Rules Phase II | 84/11A | Michele Aston | (919)541-2363 |
| Hydrogen Fluoride Production NESHAP | 95/13 | Richard Colyer | (919)541-5265 |
| Industrial and Commercial Waste Incinerators | 95/01 | George Smith | (919)541-1549 |
| Industrial Combustion Coordinated Rule Making | 96/11 | Fred Porter | (919)541-5251 |

**Table D-1. (Continued)**

| Project Title | Project Number | Project Lead | Phone Number |
|---|---|---|---|
| Industrial-Commercial-Institutional Boilers MACT | 96/04 | James Eddinger | (919)541-5426 |
| Integrated Iron & Steel Manufacturing | 93/55 | Phil Mulrine | (919)541-5289 |
| Integ. Rule for Paper, Film, & Foil Coatings | 96/02 | Dan Brown | (919)541-5305 |
| Internal Combustion Engine NESHAP & NSPS | 95/09 | Amanda Jo Agnew | (919)541-5268 |
| Iron and Steel Foundries MACT Standard | 91/59 | James Maysilles | (919)541-3265 |
| Landfills MACT | 96/09 | Martha Smith | (919)541-2421 |
| Lime Manufacturing NESHAP | 95/06 | Joseph Wood | (919)541-5446 |
| MACT Generic Rule | 96/25 | David W. Markwordt | (919)541-0837 |
| MACT Partnerships Program Development | 94/15 | Fred Dimmick | (919)541-5625 |
| Manufacture of Tetrahydrobenzaldehyde (THBA) | 93/60 | John Schaefer | (919)541-0296 |
| Medical Waste Incineration | 90/17 | Richard Copland | (919)541-5265 |
| Mineral Wool Production MACT Standard | 92/14 | Mary Johnson | (919)541-5025 |
| Miscellaneous Cellulose Categories MACT | 96/08 | Elaine Manning | (919)541-5499 |
| Miscellaneous Organic NESHAP (MON) | 95/08 | Randy McDonald | (919)541-5402 |
| Municipal Landfills NSPS and 111(d) | 87/28 | Martha Smith | (919)541-2421 |
| Municipal Waste Combustion Standard II & III | 91/05 | Walter Stevenson | (919)541-5264 |
| NESHAP for Ethylene Processes | 96/18 | Warren Johnson | (919)541-5124 |
| NESHAP for the Rubber Tire Manufacturing Industry | 96/17 | Anthony Wayne | (919)541-5439 |
| Nylon 6 Production | 93/52 | Mark Morris | (919)541-5416 |
| Off-Site Waste and Recovery Operations MACT | 91/31 | Michele Aston | (919)541-2363 |
| Oil & Gas Production & Gas Transmission & Storage | 92/06 | Martha Smith | (919)541-2421 |
| Organic Liquids (non-gasoline) Distribution MACT | 96/05 | Michele Aston | (919)541-2363 |
| Other Solid Waste Incinerators | 93/07 | George Smith | (919)541-1549 |
| Petroleum Refinery MACT Standard | 90/19 | James Durham | (919)541-5672 |

**Table D-1. (Continued)**

| Project Title | Project Number | Project Lead | Phone Number |
|---|---|---|---|
| Petro. Refineries NESHAP: FCC Units, Reformers... | 95/02 | Bob Lucas | (919)541-0884 |
| Pharmaceuticals Production MACT | 93/50 | Randy McDonald | (919)541-5402 |
| Phosphoric Acid/Phosphate Fertilizers Manuf. | 93/53 | David Painter | (919)541-5515 |
| Plywood & Particle Board Manufacturing | 95/11 | Stephen Shedd | (919)541-5397 |
| Polycarbonates Production | 93/63 | Mark Morris | (919)541-5416 |
| Polyether Polyols Production | 93/62 | David Svendsgaard | (919)541-2380 |
| Polymers and Resins I MACT Standard | 90/26 | Robert Rosensteel | (919)541-5608 |
| Polymers and Resins II MACT Standard | 84/01 | Randy McDonald | (919)541-5402 |
| Polymers and Resins III MACT | 91/54 | John Schaefer | (919)541-0296 |
| Polymers and Resins IV MACT Standard | 92/12 | Robert Rosensteel | (919)541-5608 |
| Portland Cement MACT Standard | 91/44 | Joseph Wood | (919)541-5446 |
| Primary Aluminum MACT Standard | 91/43 | Steve Fruh | (919)541-2837 |
| Primary Copper Smelting MACT Standards | 91/61 | Eugene Crumpler | (919)541-0881 |
| Primary Lead Smelting | 94/11 | Kevin Cavender | (919)541-2364 |
| Primary Magnesium Refining NESHAP | 96/12 | Iliam Rosario | (919)541-5308 |
| Printing/Publishing Industry MACT Standard | 91/42 | Dave Salman | (919)541-0859 |
| Production of Agricultural Chemicals | 93/59 | Lalit Banker | (919)541-5420 |
| Publicly Owned Treatment Works (POTW) NESHAP | 91/30 | Bob Lucas | (919)541-0884 |
| Pulp and Paper Combustion MACT (MICG) | 91/38 | Jeffrey Telander | (919)541-5427 |
| Pulp and Paper NESHAP CHEM. MILLS NON-COMB (WCPG) | 86/15A | Penny Lassiter | (919)541-5396 |
| Pulp & Paper NESHAP Non-chem Mills (WCPG) | 86/15B | Elaine Manning | (919)541-5499 |
| Reinforced Plastic Composites Production | 93/58 | Madeleine Strum | (919)541-2383 |
| Remediation Activities MACT | 96/06 | Bob Lucas | (919)541-0884 |
| Secondary Aluminum MACT Standard | 91/46 | Juan Santiago | (919)541-1084 |
| Semichemical Pulp and Paper | 94/04 | Jeffrey Telander | (919)541-5427 |
| Semiconductor Manufacturing MACT | 95/03 | David W. Markwordt | (919)541-0837 |
| Sewage Sludge Incineration NESHAP | 96/14 | Eugene Crumpler | (919)541-0881 |

**Table D-1. (Continued)**

| Project Title | Project Number | Project Lead | Phone Number |
|---|---|---|---|
| Ship Building NESHAP | 91/53B | Mohamed Serageldin | (919)541-2379 |
| Spandex Manufacturing MACT | 96/07 | Mary Tom Kissell | (919)541-4516 |
| Stage I Gasoline Marketing MACT Standard | 77/05A | Stephen Shedd | (919)541-5397 |
| Steel Pickling - HCl Process MACT Standard | 91/08B | James Maysilles | (919)541-3265 |
| Vegetable Oil Production NESHAP | 95/30 | James Durham | (919)541-5672 |
| Wood Furniture MACT Standard | 91/22 | Paul Almodovar | (919)541-0283 |
| Wood Treatment MACT Standard | 91/62 | Eugene Crumpler | (919)541-0881 |
| Wool Fiberglass Manufacturing MACT | 91/47 | William Neuffer | (919)541-5435 |

# APPENDIX E

**NOTICE OF APPLICABILITY**

Source NAME
Source Address

Dear _____:

This notice is provided to the _____ (implementing Agency) in response to the publication of the following (state/federal) standards:

40 CFR 40, Part ____ (60, 61, 63, etc.), Subpart ____ (A, NO, etc.)

or

_____ (State) Title/Code _____ (129, 2D.1101, etc.), Chapter ____

____ Please send me an initial notice of applicability form

____ I have reviewed the applicability of this standard and have determined that this facility is not subject. This determination is based on
_____
_____
_____.

All calculations required by the standard are attached. If no calculations or documentation are required, this data will be maintained and made available upon request by the _____ (implementing agency). If additional information is needed, please contact me or _____, of my staff, at (____) XXX-XXXX, ext. XXXX.

_____
Responsible Official Title

_____
Date

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF AIR POLLUTION CONTROL -- PERMIT SECTION
2200 CHURCHILL ROAD
P.O. BOX 19506
SPRINGFIELD, ILLINOIS 62794-9506

| | FOR AGENCY USE ONLY |
|---|---|
| **NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS: COMMERCIAL ETHYLENE OXIDE STERILIZERS AND FUMIGATION OPERATIONS**<br><br>**INITIAL NOTIFICATION REPORT** | FACILITY ID #:<br><br>DATE: |

**FORM MUST BE SUBMITTED BY APRIL 5, 1995**

1. Print or type the following for **each** ethylene oxide (EO) sterilizer or fumigation operation at your facility.
   Name of Owner/Operator:
   Mailing Address:
   City: State: Zip Code:

   Physical Location (If Different Than Mailing Address)
   Street Address:
   City: State: Zip Code:

   Contact Person: Phone Number: ( )

2. Check the box below if your facility:

   a. ☐ does not use an ethylene oxide sterilizer or fumigator.
   b. ☐ is exempt per 40 CFR Part 63.360 (c) - (e):

   - uses a beehive fumigator.
   - is a research or laboratory facility.
   - provides medical services to humans or animals (eg. hospitals, clinics, doctors office).

   c. ☐ uses EO in sterilization or fumigation operations.

   If you checked boxes a or b, complete the signiture section only (paragraph 7) and return the form to the address given at the top of this page. If you checked box c, continue with paragraph 3.

3. Provide the following for the EO sterilizer or fumigation operation:

   a. Method of operation (check all operations facility uses):

   I) ☐ Sterilization Chamber Vent
   ii) ☐ Aeration Room Vent
   iii) ☐ Chamber Exhaust Vent

   b. Intended control methods to achieve compliance (check all controls that apply):

   I) ☐ acid-water scrubber

ii) ☐ catalytic oxidizer
iii) ☐ thermal oxidizer
iv) ☐ other (describe):_____

4. Provide the following dates for each EO sterilizer or fumigator (if applicable):

a. Date when construction or reconstruction commenced (mm/dd/yy):

b. Check the applicable date of initial startup (**Note**: the compliance date):

| | | Compliance Date |
|---|---|---|
| ☐ | Initial startup occurred on or before 12/8/97 | 12/8/97 |
| ☐ | Initial startup occurred after 12/8/97 | Compliance date = initial startup date |

5. This facility is a(n):

i) ☐ major source (Using one or more tons of EO)
ii) ☐ area source (not major)

6. EO **usage** over the preceding 12 months (Check one box)

I) ☐ source uses less than one ton/year[2]
ii) ☐ source uses one ton/year or more but less than ten tons/year
iii) ☐ source uses 10 tons/year or more

[2] Sterilization sources using less than 1 ton of ethylene oxide are not subject to the emission standards in 40 CFR Part 63.362, **however**, the recordkeeping requirements of 40 CFR Part 63.367(c) apply.

7. I CERTIFY THE INFORMATION CONTAINED IN THIS REPORT TO BE ACCURATE AND TRUE TO THE BEST OF MY KNOWLEDGE.

Signature Date

Print or type the name and title of the Responsible Official for this facility:

Name Title

A Responsible Official can be:

- The president, vice president, secretary, or treasurer of a corporation that owns the facility, or a duly authorized representative that is responsible for the overall operation of the facility,
- An owner of the facility,
- A principal executive officer if the facility is owned by the Federal, State, City, or County government, ranking military officer if the facility is located at a military base, or
- A general partner of a partnership that owns the facility.

# APPENDIX F

# The American Business Disc. 1995 Edition (c)

This information may not be sold or otherwise provided to any party other than the Licensee. Data has been seeded to detect unauthorized use.

Company Name: EMPIRE COATING INC Telephone: (716) 589-6842
Address: 215 WEST AVE
City: ALBION State: NY ZIP: 14411

Company Name: RAYCO OF SCHENETADY INC Telephone: (518) 843-8316
Address: 4 SAM STRATTON RD
City: AMSTERDAM State: NY ZIP: 12010

Company Name: O'DONNELL METAL MAINTENANCE Telephone: (518) 943-4878
Address: 249 TRAVIS DR.
City: ATHENS State: NY ZIP: 12015

Company Name: RECORDS RESERVE COPR Telephone: (716) 344-2600
Address: 56 HARVESTER AVE
City: BATAVIA State: NY ZIP: 14020

Company Name: US CHROME COPR OF NEW YORK Telephone: (716) 343-7077
Address: 31 SWAN STREET
City: BATAVIA State: NY ZIP: 14020

Company Name: A & M MFG CO Telephone: (56) 242-0918
Address: 275 FELDMEN CT
City: BAY SHORE State: NY ZIP: 11706

Company Name: TEK DEBURR INC Telephone: (516) 667-7007
Address: 26 CLEVELAND AVE
City: BAY SHORE State: NY ZIP: 11706

Company Name: INDUSTRIAL ELECTROPLATERS INC Telephone: (607) 723-7991
Address: 172 STATE ST
City: BINGHAMTON State: NY ZIP: 13901

Company Name: TRIPLE CITIES METAL FINISHING Telephone: (607) 722-3431
Address: 4 NOWLAN RD
City: BINGHAMTON State: NY ZIP: 13901

Company Name: WILSON ELECTROPLATERS Telephone: (607) 770-4500
Address: 6 EMMA ST
City: BINGHAMTON State: NY ZIP: 13905

Company Name: LIBERTY INDUSTRIAL FINISHING Telephone: (516) 273-4488
Address: 550 SUFFOLK AVE
City: BRENTWOOD State: NY ZIP: 11717

Company Name: ACE PLATING WORKS INC Telephone: (718) 665-6500
Address: 800 E 136TH ST
City: BRONX State: NY ZIP: 10454

## The American Business Disc. 1995 Edition (c) (Continued)



Company Name: EMPIRE COATING INC
Address: 215 WEST AVE
City: ALBION
State: NY
ZIP: 14411
Telephone: (716) 589-6842

Employees: 0010
Sales: $1 - $2.5 Million
Type of Location: Not available
Credit Rating: Good

| C | Line of Business | Ad | Year |
|---|---|---|---|
| 71-02 | METAL FINISHERS | A | 1989 |

# APPENDIX G

**Alphabetized List of Industry and Business Trade Associations**
(e.g., from Wisconsin)

AFSCME, AFL-CIO, Wisconsin Legislative Council
ASFSCME County and Municipal Employees
Administrators and Supervisors Council
Alliance for Animals
Allied Construction Employers Association
American Auto Association of Wisconsin
American Automobile Manufacturer Association
American Camping Association, Wisconsin Section
American Electroplaters & Surface Finishers
American Furniture Manufacturer Association (AFMA)
American Institute Real Estate Appraisal
American Institute of Architects (Wisconsin Society)
American Lung Association of Wisconsin
American Product and Inventory Control Society
American Trucking Association
Animal Protective League Inc.
Associated Builders & Contractors of Wisconsin
Associated General Contractors of Greater Milwaukee
Associated Milk Producers, Inc.
Associated Recyclers of Wisconsin
Association of Consulting Foresters
Auto Dealers Association of Metropolitan Milwaukee
Automotive Service Association of Wisconsin
Badger State Car Wash Association
Bay View Business Association
Bowling Proprietors Association of Wisconsin
Building Owners and Managers Association of Milwaukee
Business and Industry Improvement Council
Chemical Coaters Association
Chicago Lung Association
Citizen's Natural Res. Assn. of Wisconsin, Inc.
Citizen's Commission for Clean Air
Citizens for a Better Environment
Civil Air Patrol, Wisconsin Wing
Clean Water Action Council of Northeast Wisconsin
Coalition of Wisconsin Aging Groups
Combined Health Appeal of Wisconsin
Common Cause In Wisconsin

**Alphabetized List of Industry and Business Trade Associations (Continued)**
(e.g., from Wisconsin)

Concerned Auto Recylers of Wisconsin
Conference of Retail Associations
Construction Industry Manufacturers Association
Dairy Council of Wisconsin, Inc.
Environment Wisconsin Inc.
Farm Health & Safety Council of Wisconsin
Federal Reserve Bank of Chicago, Research Department
Forest History Association of Wisconsin
Forest Industry Safety and Training Alliance
Governor's Council On Tourism
Greater Milwaukee Florists Association
Greater Milwaukee Toxics Minimization Task Force
Hispanic Chamber of Commerce
Independent Community Bankers Association of Wisconsin
Independent Contract Lobbyists
Independent Insurance Agents of Wisconsin
Industrial Perforators Association
Industrial Recyclers of Wisconsin
Industry Relations Research Association
Institute Real Estate Management
International Dairy-Deli Bakery Association
Joint Organization for Better Sewer
Kitchen Cabinet Manufacturers Association
Lake Michigan Air Directors Consortium (LADCO)
Lake Michigan Federation
Lakes States Women In Timber
League of Wisconsin Municipalities
League of Women Voters Wisconsin Inc.
Lutherans for Life of Wisconsin Inc.
MRA - The Management Association
Madison Advertising Federation
Manufacturers of Emission Controls Association
Master Builders Association of Wisconsin
Mechanical Contractors Association of Wisconsin
Metro Milwaukee Association of Commerce
Midwest Equipment Dealers Association
Midwest Food Processors Association
Midwest Hardware Association

**Alphabetized List of Industry and Business Trade Associations (Continued)**
(e.g., from Wisconsin)

Milwaukee County Labor Council
Municipal Electric Utilities Wisconsin
Milwaukee Indian Health Board, Community Health Centers
Municipal Environmental Association of Wisconsin
NAACP
NAACP-Milwaukee Chapter
National Agri-Business Association
National Association of Social Workers
National Cheese Exchange, Inc.
National Electrical Contractors Wisconsin
National Federation of Independent Business
National Paint & Coating Association
National Telemedia Council
Petroleum Marketers Association of Wisconsin
Planning Council for Health and Human Services
National Association of Wisconsin Theatre Owners
Post-secondary Agriculture Students
Printing Industries of Wisconsin
Professional Fire Fighters of Wisconsin
Professional Insurance Agents of Wisconsin
Protect Animal Life Inc.
Public Enterprise Committee
Public Relation Society of America
Public Safety Communication Officers
Sheet Metal & Air Conditioning Contractor Association
Soap and Detergent Association
Society of Automotive Historians, Wisconsin Chapter
Society of Real Estate Appraisers
Soil Science of America
Soil and Water Conservation Society
Southeast Wisconsin Regional Planning Commission (SEWRPC)
State Bar of Wisconsin
State Engineering Association
State Medical Society of Wisconsin
Tavern League of Wisconsin
Timber Producers Assn. of Michigan & Wisconsin
Trees for Tomorrow, Inc.
United Professional Quality Health Care

**Alphabetized List of Industry and Business Trade Associations (Continued)**
(e.g., from Wisconsin)

United States Small Business Association
United Transportation Union-Wisconsin Legislative Board
Urban League
WATVA
WI Assn. of Plumbing-Heating-Cooling Contractors, Inc.
WI State Employees Union, AFSCME Council 24, AFL-CIO
WISCO
Washington County Land Conservation Council
Wilderness Watch Inc.
Wisconsin AFL-CIO
Wisconsin AFL-CIO Womens Committee
Wisconsin Academy of Sciences, Arts & Letters
Wisconsin Accountants Association
Wisconsin Agri-Business Council, Inc.
Wisconsin Agri-Service Assn., Inc.
Wisconsin Agriculture Association
Wisconsin Air Forces Association
Wisconsin Ambulance Service Association
Wisconsin American Public Works Association
Wisconsin Amusement & Music Operators
Wisconsin Apple Growers Association
Wisconsin Appraisers Coalition
Wisconsin Arborist Association Inc.
Wisconsin Asphalt Pavement Association
Wisconsin Assoc. for Health, Phy. Ed., Recreation & Dance
Wisconsin Association Future Farmers America
Wisconsin Association Homes and Services for Aging
Wisconsin Association Life Underwriters
Wisconsin Association for Adult & Continuing Education
Wisconsin Association for Environmental Education
Wisconsin Association for Middle Level Education
Wisconsin Association for Supervision and Curriculum Dev.
Wisconsin Association of Campground Owners (WACO)
Wisconsin Association of Fairs
Wisconsin Association of Incinerator Operators
Wisconsin Association of Independent College & Universities
Wisconsin Association of Lakes Inc.
Wisconsin Association of Manufacturers Agents

**Alphabetized List of Industry and Business Trade Associations (Continued)**
(e.g., from Wisconsin)

Wisconsin Association of Milk & Food Sanitarians
Wisconsin Association of Taxicab Owners
Wisconsin Association of Textile Services
Wisconsin Association of Vocational Agricultural Instructors
Wisconsin Auto Collision Technical Association
Wisconsin Auto Merchandising Council
Wisconsin Automatic Merchandising Council
Wisconsin Automobile & Truck Dealers Association
Wisconsin Automobile Clubs in Association
Wisconsin Automotive Parts Association
Wisconsin Automotive Trades Association
Wisconsin Bakers Association
Wisconsin Bankers Association
Wisconsin Beef Council, Inc.
Wisconsin Berry Growers Association
Wisconsin Beverage Licensees Association
Wisconsin Biotechnology Association
Wisconsin Bowhunters Association Inc.
Wisconsin Broadcasters Association
Wisconsin Builders Association
Wisconsin Business Education Association
Wisconsin Business Womens Coalition
Wisconsin Cable Communications Association
Wisconsin Cast Metals Association
Wisconsin Cattlemens Association
Wisconsin Cattle women Association
Wisconsin Chapter American Fisheries Society
Wisconsin Chapter Association of General Contractors
Wisconsin Chapter Nature Conservancy
Wisconsin Chapter Tax Executives Institute
Wisconsin Chapter Wildlife Society
Wisconsin Cheese Makers Association
Wisconsin Chiropractic Association
Wisconsin Christmas Tree Producers Association
Wisconsin City Management Association
Wisconsin Coin Laundry Association
Wisconsin Communities & Economic Development
Wisconsin Community Education Association

**Alphabetized List of Industry and Business Trade Associations (Continued)**
(e.g., from Wisconsin)

Wisconsin Comptel
Wisconsin Concrete Masonry Association
Wisconsin Concrete and Pavement Association
Wisconsin Conference Journeymen Painters
Wisconsin Conference of Churches
Wisconsin Consumer Packaging Council
Wisconsin Contemporary Gift Association
Wisconsin Coop Tobacco Growers Association
Wisconsin Council for the Social Studies
Wisconsin Council of Safety
Wisconsin Counties Association
Wisconsin Counties Mineral Resources Association
Wisconsin Counties Utility Tax Association
Wisconsin County Agents Association
Wisconsin County Executives and Administrators
Wisconsin County Forests Association
Wisconsin County Planning Directors
Wisconsin County Solid Waste Managers Association
Wisconsin Credit Union League
Wisconsin Dairy Products Association Inc.
Wisconsin Dairy Technology Society
Wisconsin Dental Association, Inc.
Wisconsin Dental Laboratory Association
Wisconsin Dietetic Association
Wisconsin Eagle Forum
Wisconsin Economic Development Association
Wisconsin Economics Education Council
Wisconsin Electric Cooperative Association
Wisconsin Electronic Sales and Service Association
Wisconsin Environmental Health Association
Wisconsin Environmental Laboratory Association
Wisconsin Equipment Lessors Association
Wisconsin Fabricare Institute
Wisconsin Farm Bureau Federation Coop
Wisconsin Farm Bureau Service Cooperative
Wisconsin Farm Equipment Association
Wisconsin Federated Humane Societies
Wisconsin Federation of Cooperatives

**Alphabetized List of Industry and Business Trade Associations (Continued)**
(e.g., from Wisconsin)

Wisconsin Fertilizer & Chemical Association
Wisconsin Forest Fire Fighters Association
Wisconsin Forest Productivity Council
Wisconsin Foundation for Independent Colleges
Wisconsin Funeral Directors Association
Wisconsin Grain Dealers Association
Wisconsin Greyhound Owners Association
Wisconsin Grocers Association
Wisconsin Grounds Management Association
Wisconsin Groundwater Association
Wisconsin HMO Association
Wisconsin Hatcheries Association
Wisconsin Hazardous Material Responders
Wisconsin Health Care Association
Wisconsin Health Education Center
Wisconsin Health Information Management Association
Wisconsin Health Underwriters Association
Wisconsin Highway Users Conference
Wisconsin Hospital Association
Wisconsin Humane Society
Wisconsin Independent Businesses
Wisconsin Independent Merchants & Manufacturers Association
Wisconsin Independent Tire Dealers & Retread
Wisconsin Information and Referral Providers
Wisconsin Innkeepers Association
Wisconsin Installment Bankers
Wisconsin Institute of CPAs
Wisconsin Institute of Scrap Recycling Industries
Wisconsin Insulation Contractors Association
Wisconsin Insurance Alliance
Wisconsin Jewelers Association
Wisconsin Junior Limousine Association
Wisconsin Land Conservation Association
Wisconsin Land Title Association, Inc.
Wisconsin League of Financial Institutions, Ltd.
Wisconsin Leather Industries Association
Wisconsin Licensees Association
Wisconsin Limousine Association

**Alphabetized List of Industry and Business Trade Associations (Continued)**
(e.g., from Wisconsin)

Wisconsin Liquid Waste Carriers Association
Wisconsin Liquor Wholesalers lndependent
Wisconsin Locally Owned Telephone
Wisconsin Manufactured Housing Association
Wisconsin Marketing and Management Association
Wisconsin Master Builders Association
Wisconsin Meat Processors Association
Wisconsin Medical Group Management Association
Wisconsin Medical Record Association
Wisconsin Milk Haulers Association
Wisconsin Milk Marketing Board
Wisconsin Modular Housing Industry
Wisconsin Mortgage Bankers Association
Wisconsin Motorcycle Dealers Association
Wisconsin Movers Association Inc.
Wisconsin National Farmers Organization
Wisconsin Natural Food Associates, Inc.
Wisconsin Newspaper Association
Wisconsin Nurserymen's Association
Wisconsin Organic Growers Association
Wisconsin Paint & Coating Association
Wisconsin Painting & Decor Contractors
Wisconsin Paper Advertising Association
Wisconsin Paper Council
Wisconsin Park and Recreation Association
Wisconsin Petroleum Council
Wisconsin Pharmacists Association
Wisconsin Potato and Vegetable Growers Assc., Inc.
Wisconsin Precast Concrete Association
Wisconsin Primary Health Care Association
Wisconsin Professional Employee Council
Wisconsin Professional Florists Association
Wisconsin Psychiatric Association
Wisconsin Public Health Association Inc.
Wisconsin Public Health Association, Inc.
Wisconsin Pump & Well Suppliers
Wisconsin Railroad Committee
Wisconsin Ready Mixed Concrete Association

**Alphabetized List of Industry and Business Trade Associations (Continued)**
(e.g., from Wisconsin)

Wisconsin Real Property Listers Association
Wisconsin Realtors Association
Wisconsin Recreational Independent Inc.
Wisconsin Restaurant Association
Wisconsin Retail Bankers Association
Wisconsin Retail Hardware Association
Wisconsin Retail Lumbermen's Association, Inc
Wisconsin Road Builders Association
Wisconsin Road Builders Association
Wisconsin Rural Development Center
Wisconsin Social Service Association
Wisconsin Society for Clinical Social Work
Wisconsin Society for Ornithology Inc.
Wisconsin Society of Biological Science
Wisconsin Society of Land Surveyors
Wisconsin Society of Mechanical Engineers
Wisconsin Society of Orthodontists
Wisconsin Society of Professional Engineers
Wisconsin Society of Science Teachers
Wisconsin Soft Drink Association
Wisconsin Software Publishers Association
Wisconsin Sporting Goods Association
Wisconsin State Brewers Association
Wisconsin State Council of Carpenters
Wisconsin State Cranberry Growers
Wisconsin State Firefighters Association
Wisconsin State Grange
Wisconsin State Health Council
Wisconsin State Telephone Association
Wisconsin Tavern Hosts
Wisconsin Teachers Credit Union
Wisconsin Teamsters Joint Council #39
Wisconsin Technology Education Association
Wisconsin Tourism Federation
Wisconsin Towing Association
Wisconsin Town Mutual Insurance Co. Association
Wisconsin Town Mutual Insurance Company Assn.
Wisconsin Towns Association

**Alphabetized List of Industry and Business Trade Associations (Continued)**
(e.g., from Wisconsin)

Wisconsin Towns Association
Wisconsin Transportation Development Association
Wisconsin Trappers Association Inc.
Wisconsin Tree Farm Committee
Wisconsin Truck Stop Operators Association
Wisconsin Trustees Association
Wisconsin Underground Contractors Association
Wisconsin Urban Transit Association
Wisconsin Utilities Association
Wisconsin Veterinarian Medical Association
Wisconsin Warehousemans Association
Wisconsin Water Quality Association
Wisconsin Well Water Association
Wisconsin Wholesale Beer Dist Association, Inc.
Wisconsin Wildlife Federation Inc.
Wisconsin Wine and Spirit Institute
Wisconsin Wineries Association
Wisconsin Women for Agriculture
Wisconsin Woodland Owners Association Inc.
Wisconsin and Upper Michigan Florists Association
Wisconsin-Minnesota Canned Vegetable Council
Wisconsin Apartment Association
Women In Communications Inc.
Womens International Bowling Congress

# APPENDIX H

## Example Inspection Checklists

# APPENDIX H1

# Multimedia Inspection Checklist for Dry Cleaning Facilities

# Multimedia Inspection Checklist For Dry Cleaning Facilities

(Taken directly from “Multimedia Inspection Guidance for Dry Cleaning Facilities” OECA/EPA July 30, 1996.)

**DRAFT**

## TABLE OF CONTENTS

# MULTIMEDIA INSPECTION CHECKLIST FOR DRY CLEANING FACILITIES

## I. GENERAL FACILITY AND MANAGEMENT INFORMATION

### A. General Facility Information

1. Date of Inspection _____

2. Facility Name: _____

3. Facility Telephone Number: _____

4. Facility Address (physical location): _____

_____

_____

_____

5. Mailing Address (if different): _____

_____

_____

_____

6. Facility Owner Contact Information (Name and phone): _____

_____

_____

7. Facility Operator/Manager (if different From owner (Name and phone): _____

_____

_____

8. Inspector(s):

| Name | Title/Affiliation | Phone Number |
|---|---|---|
| (1) _____ | _____ | _____ |
| (2) _____ | _____ | _____ |
| (3) _____ | _____ | _____ |

9. Original establishment date of facility:

10. Establishment date of current ownership:

11. Establishment date at current location:

12. Is a new annual perc consumption level calculated on the first of each month reflecting usage for the past 12 months? Yes [ ] No [ ]

    Record most current annual perc consumption:
    Gallons: _____
    From _____ (month, year) to _____ (month, year)
    Date calculated: _____

13. Size categorization of facility under federal air emissions regulations (based on information in Question 12):

    [ ] Small area source
    [ ] Large area source
    [ ] Major source

14. Size categorization of facility under federal hazardous waste regulations:

    [ ] CESQG
    [ ] SQG
    [ ] LQG

15. Does the facility have an EPA ID # as a generator of hazardous wastes?
    Yes [ ] No [ ]

    EPA ID #:

16. Does the facility discharge wastewater into a municipal sewer?
    Yes [ ] No [ ]

    Name of POTW:
    Permit # (if applicable):

    If not, please explain.

**B. Facility Management**

17. Is the dry cleaner a member of a trade association? Yes [ ] No [ ]

    If so, name of association: _____

    If not, ensure that the dry cleaner is aware of the role of trade organizations in providing compliance assistance. Distribute national or local trade association literature as appropriate to serve as initial contact points.

18. What types of training activities are conducted at the facility (include safety, emergency procedures, and pollution prevention programs)?

19. Has a pollution prevention or waste minimization plan been developed by the facility?
Yes [ ] No [ ]

If so, describe:

20. Has the facility evaluated which wastes are probable candidates for reductions through pollution prevention activities? Yes [ ] No [ ]

If so, list the wastes and describe pollution prevention activities currently being undertaken.

21. Is the facility owner familiar with multiprocess wet cleaning? Yes [ ] No [ ]

Has the facility considered experimenting with multiprocess wet cleaning? Yes [ ] No [ ]

## II. DRY CLEANING PROCESS AREA

### A. Dry Cleaning General Equipment Information

22. Supply the following information about the dry cleaning machines in use at the facility:

| # | Type[i] | Date Installed | New or Existing | Manufacturer and model number | Perc filtration system(s)[ii] | Perc vapor recovery system[iii] | Installation date of perc vapor recovery system |
|---|---|---|---|---|---|---|---|
| 1 | | | | | | | |
| 2 | | | | | | | |
| 3 | | | | | | | |

[i]Dry-to-dry (D) or Transfer (T)
[ii]List all types of filters used
[iii]Refrigerated condenser (RC) or carbon adsorber (CA)

23. New transfer machines are no longer allowed. Is the facility in compliance? Yes [ ] No [ ]

24. If existing transfer machines are used, has the facility performed a thorough cost analysis to determine what the payback period would be on the purchase of a dry-to-dry machine? Yes [ ] No [ ]

25. Existing transfer machines in major sources must be surrounded in a room enclosure by September 23, 1996. Is the facility in compliance? Yes [ ] No [ ]

26. Were any carbon adsorbers that are used as perc vapor recovery systems for drying process vapors installed before September 22, 1993? Yes [ ] No [ ]

27. Does the facility use a carbon adsorber as a residual perc recovery system to vent aeration cycle vapors?
Yes [ ] No [ ]

## B. Refrigerated Condensers Performance Monitoring

28. Are temperature sensors for refrigerated condensers installed for each machine in accordance with manufacturers' specifications? Yes [ ] No [ ]

29. Are temperature sensors for all machines designed to measure temperatures from 32°F to 120°F to an accuracy of ±2°F? Yes [ ] No [ ]

30. Record temperature sensor readings if available:

| Temperature Sensor | Machine #1 | Machine #2 | Machine #3 | Criteria for compliance |
|---|---|---|---|---|
| (a) Dryer airstream at condenser outlet (°F) | | | | Less than or equal to 45°F |
| (b) Washer airstream at condenser inlet (°F) | | | | none |
| (c) Washer airstream at condenser outlet (°F) | | | | none |
| (d) Washer airstream net temp. drop {(b) - (c)} (°F) | | | | At least 20°F |
| (e) In compliance? (Y/N) | | | | |

## C. Carbon Adsorber Performance Monitoring (complete if carbon adsorbers are used)

31. Are sampling ports for carbon adsorbers properly located in accordance with federal regulations (8 duct diameters downstream and 2 duct diameters upstream of any flow disturbance)? Yes [ ] No [ ]

32. Are they kept closed when not in use? Yes [ ] No [ ]

33. Indicate the established period desorption schedule for each machine (as necessary, as indicated by tests, but at least weekly). Note the date when each adsorber was last desorbed and measure the perc concentration in the exhaust with a colorimetric detector while the drying cycle is on. (Note: It is important to note that the perc concentration should usually be measured at the end of a use cycle, just prior to desorption. A measurement taken at any other time only ensures that the adsorber is in compliance at that time, not necessarily for the duration of the use cycle. However, given time and logistical limitations, inspections schedules generally cannot accommodate desorption schedules for each machine.

| Machine # | Indicate Periodic Desorption Schedule[i] | Date Last Desorbed | Measured Perc Concentration in Exhaust Airstream | Use of Carbon Adsorber *(A,B, or C as indicated by table below)*[ii] | Perc Concentration Limit *(as indicated by table below)*[ii] |
|---|---|---|---|---|---|
| 1 | | | | | |
| | | | | | |
| 2 | | | | | |
| | | | | | |
| 3 | | | | | |
| | | | | | |

[i]Indicate schedule specifics (day of week, etc.)

| Carbon adsorber is used: | Indicate with | Perc Limit (ppm) |
|---|---|---|
| As main perc vapor recovery system | A | 100 |
| As residual vapor recovery system (tested during aeration while the door is open) | B | 100 |
| As residual vapor recovery system (tested during aeration while the door is closed) | C | 300 |

**D. Leak Detection**

34. Is the odor of perc readily detectable anywhere in the facility? Yes [ ] No [ ]

    If so, where?

35. Is the leak detection program conducted weekly or biweekly as required? Yes [ ] No [ ]

36. Allow owner or designated representative to guide you through the facility and demonstrate procedures for the weekly/biweekly leak detection inspection for each machine. The inspection should include the items listed below. Tabulate results and record any leaks detected.

    Inspection done by:

    [ ] Sight, smell, and feel
    [ ] Monitoring instrument (Type: _____)

| # | Components: | Signs of Leaking (Y, N, n/a)? | | | Explain all "Yes" answers: |
|---|---|---|---|---|---|
| | | Machine #1 | Machine #2 | Machine #3 | |
| 1 | Hose & pipe connections, fittings, couplings, valves | | | | |
| 2 | Door gaskets & seatings | | | | |
| 3 | Pumps | | | | |
| 4 | Solvent tank & containers | | | | |
| 5 | Water separators | | | | |
| 6 | Muck cookers | | | | |
| 7 | Stills | | | | |
| 8 | Exhaust dampers | | | | |
| 9 | Diverter valves | | | | |
| 10 | Filter gaskets and seatings | | | | |
| 11 | Cartridge filter housings | | | | |

37. Are seals and gaskets periodically replaced before they become brittle? Yes [ ] No [ ]

38. What type of solvent leak detection systems are in use?

39. What other methods does the facility use to detect leaks? (e.g., drip pans, etc.)

40. In transfer machines, is the exhaust damper easily accessible? Yes [ ] No [ ]

    If not, is there a suitable outlet downstream for testing the proper closure of the exhaust damper?

    Yes [ ] No [ ]

**E. Miscellaneous Operation and Maintenance**

41. Are all machines operated as per manufacturer's specifications and recommendations?

    Yes [ ] No [ ]

42. Are machine doors kept closed except when transferring clothes? Yes [ ] No [ ]

43. Are all spent cartridges drained at least 24 hours before disposal? Yes [ ] No [ ]

    Alternatively, are they steam stripped before disposal? Yes [ ] No [ ]

## III. PERC AND PERC WASTE HANDLING AREAS

### A. Perc Storage and Dispensing

44. Is perc stored on-site? Yes [ ] No [ ]

    If so, is all perc stored in tightly sealed containers and free from leakage? Yes [ ] No [ ]

45. How frequently is perc delivery available?

46. How is perc delivered to the dry cleaning machines?

### B. Satellite Waste Accumulation Area

47. Do satellite waste accumulation areas contain less than 55 gallons of accumulating wastes?

    Yes [ ] No [ ]

48. Are all full containers sealed and dated less than 3 days (72 hours) ago? Yes [ ] No [ ]

49. Are all containers tightly closed and free from leakage? Yes [ ] No [ ]

50. Are all containers clearly marked as hazardous waste? Yes [ ] No [ ]

## C. Hazardous Waste Storage Area

51. Are all containers tightly closed and free from leakage or deterioration? Yes [ ] No [ ]

52. Are all containers clearly marked as hazardous waste? Yes [ ] No [ ]

53. Do all containers bear a date representing the day the container was filled and designated for disposal/treatment? Yes [ ] No [ ]

54. Are all the dates on the containers in compliance with on-site waste storage time limits for generators of hazardous wastes? (No limit for CESQGs, 180 days for SQGs, 270 days for SQGs that must transport their wastes 200 miles.) Yes [ ] No [ ]

    Note the date of oldest container:

    If the time limit is exceeded, does the facility have the required EPA permit for storage facilities? Yes [ ] No [ ]

55. The facility must not be storing quantities of waste in excess of the quantity storage limits. Determine whether the facility is in compliance as follows:

    Determine the total weight of all perc wastes in the storage area.

    Each 15-gallon container can hold about 120 lbs (55 kg) of perc waste.

    Each 55-gallon container can hold about 440 lbs (200 kg) of perc waste.
    Maximum quantity limits are as follows: CESQG—2,200 lbs; SQG—13,200 lbs.

    For 15-gallon containers:

    _____ × 120 lbs/container = _____ lbs in storage # of full containers:

    For 55-gallon containers:

    _____ × 440 lbs/container = _____ lbs in storage # of full containers

    On-site storage quantity limit (lbs):_____

    Is the facility in compliance? Yes [ ] No [ ]

## D. Hazardous Wastes Shipping

56. Does the facility ship hazardous wastes off-site? Yes [ ] No [ ]

57. Does the facility track the wastes with a manifest form? Yes [ ] No [ ]

58. Are all containers labeled with the 4-inch DOT POISON label? Yes [ ] No [ ]

59. Are all containers marked with the proper DOT shipping name and number? Yes [ ] No [ ]

**E. Wastewater Management**

60. Does the facility discharge industrial wastewater into the following?

Municipal sewer Yes [ ] No [ ]

On-site disposal system which meets the definition of injection well Yes [ ] No [ ]

Holding tank Yes [ ] No [ ]

*For discharges to municipal sewers:*

61. Does the facility have a current wastewater permit? Yes [ ] No [ ]

If not, has the facility applied for a new permit? Yes [ ] No [ ]

62. What parameters are limited and/or monitored in the facility's permit?

| Parameter | Limit | Monitoring Frequency |
|---|---|---|
| (1)_____ | _____ | _____ |
| (2)_____ | _____ | _____ |
| (3)_____ | _____ | _____ |

63. Is monitoring conducted as required by the permit (with respect to sampling location, frequency)? Yes [ ] No [ ]

64. Does the facility have a sampling point available which is representative of its process wastewaters discharged to the POTW? Yes [ ] No [ ]

65. Is the effluent currently in compliance with the limitations established in the permits? Yes [ ] No [ ]

If not, describe all violations found, including parameter limit exceeded, date of violation, and any follow-up samples or actions.

66. Has the discharge changed significantly since the permit was issued? Yes [ ] No [ ]

    If so, was the permitting authority notified? Yes [ ] No [ ]

    Describe the changes.

67. Describe any wastewater treatment employed at the facility.

68. If the facility discharges to a POTW, has it complied with the recordkeeping and reporting requirements contained in 40 CFR 403.12(o)? Yes [ ] No [ ]

69. Has the facility ever discharged 15 kg of perc to the POTW within a calendar month? Yes [ ] No [ ]

    If so, were the proper authorities notified of the release? Yes [ ] No [ ]

*For discharges to injection wells:*

70. Does the facility have a Federal or State UIC permits? Yes [ ] No [ ]

71. Does the facility dispose of perc wastes and/or other hazardous chemicals in the injection well? Yes [ ] No [ ]

*For discharges to holding tanks:*

72. Does the facility have the tank pumped out regularly by a licensed waste hauler for proper, legal disposal? Yes [ ] No [ ]

## IV. RECORDS AND FILES INSPECTION

### A. Reporting

73. Did the facility file an initial report with EPA (by June 18, 1994, or upon startup for new facilities)? Yes [ ] No [ ]

    Date filed: _____

74. Did the facility file a compliance report (within 30 days of startup or 30 days after NESHAP regulations take effect)? Yes [ ] No [ ]

    Date filed: _____

    ***Note to inspector: Ask to see copies of the initial report and compliance report.***

### B. Recordkeeping

75. Are the results of temperature sensor monitoring for refrigerated condensers kept on record for the past 5 years of operations? Yes [ ] No [ ]

    Do the results show that all refrigerated condensers are in compliance with performance requirements? Yes [ ] No [ ]

76. Are the results of colorimetric tube monitoring for carbon adsorbers kept on record for the past 5 years of operations? Yes [ ] No [ ]

    Has a periodic (at least weekly) desorption schedule been established and adhered to for each adsorber? Yes [ ] No [ ]

    Does monitoring of adsorbers take place during the last run prior to desorption? Yes [ ] No [ ]

    Do the results show that all carbon adsorbers are in compliance with performance requirements? Yes [ ] No [ ]

77. Are monthly totals of perc purchase records kept on-site for the past 5 years? Yes [ ] No [ ]

78. Are records of weekly/biweekly inspections for leaks available for each machine for the last 5 years (or since startup of facility)? Yes [ ] No [ ]

79. Are any detected leaks repaired within 24 hours whenever possible? Yes [ ] No [ ]

80. Are all needed repair parts ordered within 2 working days? Yes [ ] No [ ]

81. Are needed repair parts installed within 5 days of receipt? Yes [ ] No [ ]

82. Note any recurring problems:

83. Are copies of manifest forms maintained on-site for 3 years? Yes [ ] No [ ]

84. Are any return copies of manifest forms (from the waste receiving facility) missing? Yes [ ] No [ ]

85. If so, have exception reports been filed and copies maintained on-site? Yes [ ] No [ ]

    What action has been taken to determine the status of the waste shipment or notify the proper authorities?

86. Are copies of the design specifications and operating manuals for each dry cleaning system and each emission control device kept on-site at the facility? Yes [ ] No [ ]

87. Has the solvent mileage been calculated for each machine? Yes [ ] No [ ]

If so, record the results (gallons perc/1,000 lb clothes) _____

If not, does the facility owner understand how to calculate solvent mileage and how to use it as a waste minimization indicator? Yes [ ] No [ ]

## V. ADDITIONAL COMMENTS

# APPENDIX H2

## Inspection Checklist for Chromium Electroplating and Anodizing

**DRAFT**

# Chromium Electroplating And Anodizing Inspection Checklist

Inspection Date _____

Facility Name _____

Facility Address _____

_____

_____

Attendees _____

_____

_____

_____

_____

_____

## I. EMISSION SOURCE TYPE* and CONTROL EQUIPMENT

| | | | |
|---|---|---|---|
| __ | small, existing hard | ___ | packed-bed scrubber (PBS) |
| __ | other hard | ___ | composite mesh-pad (CMP) |
| __ | decorative | ___ | fume suppressant and/no wetting agent |
| __ | anodizing | ___ | fume suppressant (FS) |

* See details in Attachment 1 (Table 3-1 of the "Guidebook on How to Comply With the Chromium Electroplating and Anodizing NESHAP).

## II. WORK PRACTICES

1. Operation and maintenance plan (O&M)

   Yes___ No___

2. Records of Quarterly inspections:

   control devices ___

   ductwork ___

   monitoring equipment ___

3. Process operating time

4. For tanks using fume suppressant

   a. Date and time of each addition of fume suppressant_____

   b. For trivalent decorative purchasing records of bath compounds:

      Yes___ No___

## III. INITIAL PERFORMANCE TEST

Yes___ No___

exemptions:
- decorative or anodizing with wetting agent and surface tension to a max. 45 dynes/cm
- decorative that use a trivalent chromium bath

## IV. ONGOING COMPLIANCE MONITORING (Table 5-3 of the Guide).

For add-on pollution control specified in regulations (use monitoring parameters as per initial performance test):

1. Composite mesh-pad scrubber
   (check daily) pressure drop across the system
   Initial test___ Actual___

2. Packed-bed scrubber

(check daily) Pressure drop across system

Initial test___ Actual___

(daily) Velocity pressure at system inlet (i.e. velocity of the gas stream at the inlet of the unit)

Initial test___ Actual___

3. Packed-bed scrubber/composite mesh-pad system
   (daily) Pressure drop across the mesh-pad system

   Initial test___ Actual___

4. Fiber-bed mist eliminator
   (daily) Pressure drop across the mist eliminator

   Initial test___ Actual___

   (daily) Pressure drop across the control device located upstream of the fiber bed that prevents plugging

   Initial test___ Actual___

5. Wetting Agent or combination wetting agent/foam blanket fume suppressants
   (@4 or 8 hours. See Attachment II, Table 5-3). Surface tension

   Initial test___ Actual___

6. Foam blanket-type fume suppressant
   (every hour for every new tank solution. If no EE, @4 hours. See Attachment II, Table 5-3) Foam blanket thickness

7. Fume suppressant/add-on control device

   Combination of the above

For control system not specified in the regulations, EPA approved parameters:

**V. RECORDKEEPING** (except decorative with trivalent bath*)

1. Inspection records

2. Equipment maintenance records

3. Records of the occurrence, duration and cause of excess emissions

4. Performance test results

5. Monitoring data

* for decorative electroplating with trivalent chromium bath submit initial notification and an initial compliance status report

**VI. REPORTING** (except for decorative with trivalent bath*)

1. Initial notification

   Yes____ No____

2. Performance test notification

   Yes____ No____

3. Performance test data

   _____

4. EER's submission

   Yes____ No____

   * notification and initial compliance status report

# APPENDIX I

## Contacts

# APPENDIX I1

# Regional Air Toxics Coordinators

# REGIONAL AIR TOXICS CONTACTS

Janet Bowen
EPA Region I (CAP)
J.F.K. Federal Building
Boston, MA 02203-2211
PH: (617) 565-3595
Fax: (617) 565-4940

Umesh Dholakia
EPA Region II
290 Broadway
New York, NY 10007-1866
PH: (212) 637 4023
Fax: (212) 637-3901

Mike Markowski
Alice Chow (enforcement)
EPA Region III (3AT23)
841 Chestnut Building
Philadelphia, PA 19107
Mike (215) 566-2063
Alice (215) 566-2144
FAX: (215) 566-2114

Lee Page
EPA Region IV (AR-4)
100 Alabama Street, SW
Atlanta, GA 30303-3104
PH: (404) 562-9131
FAX: (404) 562-9095

Bruce Varner
EPA Region V (AE-17J)
77 W. Jackson Blvd.
Chicago, IL 60604
PH: (312) 886-6793
FAX: (312) 353-8289

Belinda Breidenbach
Charlie Garlow, OECA
Belinda PH:(202) 564-7022
Charlie PH:(202) 564-1088
Belinda's FAX: (202) 564-0050
Charlie's FAX: (202) 564-0068

Robert Todd
EPA Region VI (6PD-R)
1445 Ross Avenue,Suite 700
Dallas, TX 75202-2733
PH: (214) 665-2156
Fax: (214) 665-7263

Richard Tripp
EPA Region VII
726 Minnesota Avenue
Kansas City, KS 66101
PH: (913) 551-7566
FAX: (913) 551-7065

Victoria Parker-Christensen
Ann-Marie Patrie (AP2-A)
Heather Rooney (8ENF-T) R VIII
999 18th Street, Suite 500
Denver, CO 80202-2405
VPC: (303) 312-6441
Ann Marie: (303) 312-6524
Heather: (303) 312-6971
FAX: (303) 312-6064
Heather's FAX: (303) 312-6409

Mae Wang
EPA Region IX (A-5-2)
75 Hawthorne Street
San Francisco, CA 94105
PH: (415) 744-1200
FAX: (415) 744-1076

Chris Hall
EPA Region X (OAQ-107)
1200 Sixth Avenue
Seattle, WA 98101
PH: (206) 553-1949
FAX: (206) 553-0404

Julie Andresen
EPA/OAQPS
RTP, NC 27711
PH: (919) 541-5339
FAX: (919) 541-2664

# APPENDIX I2

# OAQPS and OECA NSPS and NESHAP Contacts

# List of OAQPS and OECA NSPS and NESHAP Contacts
# (11/07/96)

| Regulation - Part 60 | OAQPS Contact | Phone # | OC Contact | Phone # |
|---|---|---|---|---|
| NSPS Subpart A: General Provisions | Jim Szykman | 919-541-2452 | Sally Mitoff<br>Belinda Breidenbach | (202) 564-7012<br>(202) 564-7022 |
| NSPS Subpart D, Da, Db, Dc: Boilers | Rick Copland<br>Jim Eddinger | 919-541-5265<br>919-541-5426 | Chris Oh | (202) 564-7004 |
| NSPS Subpart E: Incinerators | Fred Porter | 919-541-5251 | Joyce Chandler | (202) 564-7073 |
| NSPS Subpart Ea: Municipal Waste Combustors | Walt Stevenson | 919-541-5264 | Joyce Chandler | (202) 564-7073 |
| NSPS Subpart F: Portland Cement | Joe Wood | 919-541-5446 | Scott Throwe | (202) 564-7013 |
| NSPS Subpart G: Nitric Acid Plants | Bill Neuffer | 919-541-5435 | Jeff Kenknight | (202) 564-7033 |
| NSPS Subpart H: Sulfuric Acid Plants | | 919-541- | Dawn Banks-Waller | (202) 564-7034 |
| NSPS Subpart I: Asphalt Concrete Plants | Mary Johnson | 919-541-5025 | Scott Throwe | (202) 564-7013 |
| NSPS Subpart J: Petroleum Refineries | Fred Porter<br>Gail Lacy | 919-541-5251<br>919-541-5261 | Tom Ripp<br>Dan Chadwick | (202) 564-7003<br>(202) 564-7054 |
| NSPS Subpart K, Ka, Kb: Storage Tanks | Randy McDonald | 919-541-5402 | Everett Bishop | (202) 564-7032 |
| NSPS Subpart L: Secondary Lead Smelters | Kevin Cavender | 919-541-2364 | Jane Engert | (202) 564-5021 |
| NSPS Subpart M: Brass & Bronze | Eugene Crumpler | 919-541-0881 | Jane Engert | (202) 564-5021 |
| NSPS Subpart N, Na: BOF | Phil Mulrine | 919-541-5289 | Maria Malave | (202) 564-7027 |

## List of OAQPS and OECA NSPS And NESHAP Contacts (continued)
**(11/07/96)**

| Regulation - Part 60 | OAQPS Contact | Phone # | OC Contact | Phone # |
|---|---|---|---|---|
| NSPS Subpart O: Sewage Treatment Plants | Eugene Crumpler | 919-541-0881 | John Dombrowski | (202)564-7036 |
| NSPS Subpart P: Primary Copper Smelters | Eugene Crumpler | 919-541-0881 | Jane Engert | (202) 564-5021 |
| NSPS Subpart Q: Primary Zinc Smelters | Al Vervaert | 919-541-5602 | Jane Engert | (202) 564-5021 |
| NSPS Subpart R: Primary Lead Smelters | Kevin Cavender | 919-541-2364 | Jane Engert | (202) 564-5021 |
| NSPS Subpart S: Primary Aluminum Reduction | Steve Fruh | 919-541-2837 | Jane Engert | (202) 564-5021 |
| NSPS Subpart T, U, V, W, X: Phosphate Fertilizer | David Painter | 919-541-5515 | Cletis Mixon<br>Steve Howie | (202) 564-4153<br>(202) 564-4146 |
| NSPS Subpart Y: Coal Preparation | Juan Santiago | 919-541-1084 | Chris Oh | (202) 564-7004 |
| NSPS Subpart Z: Ferroalloy Production | Conrad Chin | 919-541-1512 | Jane Engert | (202) 564-5021 |
| NSPS Subpart AA: Steel Plants, EAF | Phil Mulrine | 919-541-5289 | Maria Malave | (202) 564-7027 |
| NSPS Subpart AAa: Steel Plants, EAF & AOD | Phil Mulrine | 919-541-5289 | Maria Malave | (202) 564-7027 |
| NSPS Subpart BB: Kraft Pulp Mills | Jeff Telander | 919-541-5427 | Maria Eisemann | (202) 564-7016 |
| NSPS Subpart CC: Glass Manufacturing | Al Vervaert | 919-541-5602 | Scott Throwe | (202) 564-7013 |

## List of OAQPS and OECA NSPS And NESHAP Contacts (continued)
**(11/07/96)**

| Regulation - Part 60 | OAQPS Contact | Phone # | OC Contact | Phone # |
|---|---|---|---|---|
| NSPS Subpart DD: Grain Elevators | Jim Berry | 919-541-5605 | Ken Harmon | (202)564-7049 |
| NSPS Subpart EE: Surface Coating, metal furniture | Mohammed Serageldin | 919-541-2379 | Scott Throwe | (202) 564-7013 |
| NSPS Subpart GG: Stationary Gas Turbines | Sims Roy | 919-541-5263 | Chris Oh | (202) 564-7004 |
| NSPS Subpart HH: Lime Manufacturing | Joe Wood | 919-541-5446 | Scott Throwe | (202) 564-7013 |
| NSPS Subpart KK: Lead Acid Batteries | Kevin Cavender | 919-541-2364 | Jane Engert | (202) 564-5021 |
| NSPS Subpart LL: Metallic Mineral Processing | Bill Neuffer | 919-541-5435 | Keith Brown | (202) 564-7124 |
| NSPS Subpart MM: Surface Coating, Auto | Dave Salman | 919-541-0859 | Suzanne Childress | (202) 564-7018 |
| NSPS Subpart NN: Phosphate Rock | David Painter | 919-541-5515 | Cletis Mixon<br>Steve Howie | (202) 564-4153<br>(202) 564-4146 |
| NSPS Subpart PP: Ammonium Sulfate Manufacturing | David Painter | 919-541-5515 | Scott Throwe | (202) 564-7013 |
| NSPS Subpart QQ: Graphic Arts, Rotograve Printing | Dave Salman | 919-541-0859 | Ginger Gotliffe | (202) 564-7072 |
| NSPS Subpart RR: Pressure Sensitive Tape & Label Coating | Dan Brown | 919-541-5305 | Seth Heminway | (202) 564-7017 |
| NSPS Subpart SS: Surface Coating, Large Appliances | Mohammed Serageldin | 919-541-2379 | Scott Throwe | (202) 564-7013 |

## List of OAQPS and OECA NSPS And NESHAP Contacts (continued)
**(11/07/96)**

| Regulation - Part 60 | OAQPS Contact | Phone # | OC Contact | Phone # |
|---|---|---|---|---|
| NSPS Subpart TT: Surface Coating, Metal Coil | Gail Lacy | 919-541-5261 | Scott Throwe | (202) 564-7013 |
| NSPS Subpart UU: Asphalt Roofing | Juan Santiago | 919-541-1084 | Andrew Cherry | (202) 564-5011 |
| NSPS Subpart VV: VOC leaks, SOCMI | Rick Colyer | 919-541-5262 | Jeff Kenknight | (202) 564-7033 |
| NSPS Subpart WW: Surface Coating, Beverage Cans | Gail Lacy | 919-541-5261 | Scott Throwe | (202) 564-7013 |
| NSPS Subpart XX: Bulk Gasoline Terminals | Steve Shedd | 919-541-5397 | Julie Tankersley<br>Peter Bahor | (202) 564-7002<br>(202) 564-7029 |
| NSPS Subpart AAA: Woodstoves | Jeff Telander | 919-541-5427 | Robert Marshall | (202) 564-7021 |
| NSPS Subpart BBB: Rubber Tire Manufacture | Tony Wayne | 919-541-5439 | Maria Malave | (202) 564-7027 |
| NSPS Subpart DDD: Polymer Manufacture | Bob Rosensteel | 919-541-5608 | Sally Sasnett | (202) 564-7074 |
| NSPS Subpart FFF: Flexible Vinyl and Urethane | Dan Brown | 919-541-5305 | Ginger Gotliffe | (202) 564-7072 |
| NSPS Subpart GGG: Equipment Leaks, Petroleum Refineries | David Markwordt | 919-541-0837 | Tom Ripp | (202) 564-7003 |
| NSPS Subpart HHH: Synthetic Fiber | Susan Wyatt | 919-541-5674 | Belinda Breidenbach | (202) 564-7022 |
| NSPS Subpart III: SOCMI, Air Oxidation | Bob Rosensteel | 919-541-5608 | Jeff Kenknight | (202) 564-7033 |

## List of OAQPS and OECA NSPS And NESHAP Contacts (continued)
**(11/07/96)**

| Regulation - Part 60 | OAQPS Contact | Phone # | OC Contact | Phone # |
|---|---|---|---|---|
| NSPS Subpart JJJ: Dry Cleaning | Steve Shedd | 919-541-5397 | Joyce Chandler | (202) 564-7073 |
| NSPS Subpart KKK: Equipment Leaks, Onshore Natural Gas | David Markwordt | 919-541-0837 | Dan Chadwick | (202) 564-7054 |
| NSPS Subpart LLL: Onshore Natural Gas | David Markwordt | 919-541-0837 | Dan Chadwick | (202) 564-7054 |
| NSPS Subpart NNN: SOCMI Distillation Operations | Warren Johnson | 919-541-5124 | Jeff Kenknight | (202) 564-7033 |
| NSPS Subpart OOO: Non metallic Mineral Processing | Bill Neuffer | 919-541-5435 | Keith Brown | (202) 564-7124 |
| NSPS Subpart PPP: Wool Fiberglass Insulation | Bill Neuffer | 919-541-5435 | Scott Throwe | (202) 564-7013 |
| NSPS Subpart QQQ: VOC from Petroleum Wastewater | Randy McDonald<br>Elaine Manning | 919-541-5402<br>919-541-5499 | Tom Ripp<br>Dan Chadwick | (202) 564-7003<br>(202) 564-7054 |
| NSPS Subpart RRR: SOCMI Reactor Processes | Bob Rosensteel | 919-541-5608 | Jeff Kenknight | (202) 564-7033 |
| NSPS Subpart SSS: Surface Coating, Magnetic Tape | Gail Lacy | 919-541-5261 | Steve Hoover | (202) 564-7007 |
| NSPS Subpart TTT: Surface Coating, Plastic Parts for Business Machines | Ellen Ducey | 919-541-5408 | Maria Malave | (202) 564-7027 |
| NSPS Subpart UUU: Calciners and Dryers | Bill Neuffer | 919-541-5435 | Keith Brown | (202) 564-7124 |

## List of OAQPS and OECA NSPS And NESHAP Contacts (continued)
**(11/07/96)**

| Regulation - Part 60 | OAQPS Contact | Phone # | OC Contact | Phone # |
|---|---|---|---|---|
| NSPS Subpart VVV: Polymeric Coating of Supporting Substrates | Dan Brown | 919-541-5305 | Maria Malave | (202) 564-7027 |

## List of OAQPS and OECA NSPS And NESHAP Contacts
**(11/07/96)**

| Regulation - Part 61 | OAQPS Contact | Phone # | OC Contact | Phone # |
|---|---|---|---|---|
| NESHAP Subpart A: General Provisions | Jim Szykman | 919-541-2452 | Belinda Breidenbach | (202) 564-7022 |
| NESHAP Subpart B: Radon from underground Uranium Mines | ORIA (Office of Radiation & Indoor Air) | 202-233-9370 | Dan Chadwick | (202) 564-7054 |
| NESHAP Subpart C: Berylium | Al Vervaert | 919-541-5602 | Jane Engert | (202) 564-5021 |
| NESHAP Subpart D: Beryllium Rocket Motor Firing | Al Vervaert | 919-541-5602 | Virginia Lathrop | (202) 564-7057 |
| NESHAP Subpart E: Mercury | Eugene Crumpler/ Illiam Rosario | 919-541-0881/ 919-541-5308 | Jane Engert | (202) 564-5021 |
| NESHAP Subpart F: Vinyl Chloride | Bob Rosensteel | 919-541-5608 | Jeff Kenknight | (202) 564-7033 |
| NESHAP Subpart H: Radionuclides from DOE | ORP | 202-233-9370 | Joanne Callahan<br>Virginia Lathrop | (202) 564-5009<br>(202) 564-7057 |
| NESHAP Subpart I: Radionuclide Emissions | ORP | 202-233-9370 | Joanne Callahan<br>Virginia Lathrop | (202) 564-5009<br>(202) 564-7057 |
| NESHAP Subpart J: Benzene Leaks | Jan Meyer | 919-541-5254 | Rafael Sanchez | (202) 564-7028 |
| NESHAP Subpart K: Radionuclide from Elemental Phosphorous | ORP | 202-233-9370 | Joanne Callahan<br>Virginia Lathrop | (202) 564-5009<br>(202) 564-7057 |
| NESHAP Subpart L: Coke | Lula Melton | 919-541-2910 | Maria Malave | (202) 564-7027 |
| NESHAP Subpart M: Asbestos | S. Fairchild-Zapata | 919-541-5167 | Tom Ripp | (202) 564-7003 |

## List of OAQPS and OECA NSPS And NESHAP Contacts (continued)
**(11/07/96)**

| Regulation - Part 61 | OAQPS Contact | Phone # | OC Contact | Phone # |
|---|---|---|---|---|
| NESHAP Subpart N: Inorganic Arsenic From Glass Manufacture | Al Vervaert | 919-541-5602 | Scott Throwe | (202) 564-7013 |
| NESHAP Subpart O: Arsenic from Primary Copper Smelters | Eugene Crumpler | 919-541-0881 | Jane Engert | (202) 564-5021 |
| NESHAP Subpart P: Arsenic | Al Vervaert | 919-541-5602 | Jane Engert | (202) 564-5021 |
| NESHAP Subpart R: Radon from Phosphogypsum Stacks | ORP | 202-233-9370 | Joanne Callahan<br>Virginia Lathrop | (202) 564-5009<br>(202) 564-7057 |
| NESHAP Subpart T: Radon from disposal of Uranium Mine Tailings | ORP | 202-233-9370 | Joanne Callahan<br>Virginia Lathrop | (202) 564-5009<br>(202) 564-7057 |
| NESHAP Subpart V: Equipment Leaks, | Jan Meyer | 919-541-5254 | Rafael Sanchez | (202) 564-7028 |
| NESHAP Subpart W: Radon from Operating Mill Tailings | ORP | 202-233-9370 | Joanne Callahan<br>Virginia Lathrop | (202) 564-5009<br>(202) 564-7057 |
| NESHAP Subpart Y: Benzene Storage Vessels | Randy McDonald | 919-541-5402 | Rafael Sanchez | (202) 564-7028 |
| NESHAP Subpart BB: Benzene from Transfer Operations | David Markwordt | 919-541-0837 | Rafael Sanchez | (202) 564-7028 |
| NESHAP Subpart FF: Benzene Waste Operations | Bob Lucas | 919-541-0884 | Rafael Sanchez | (202) 564-7028 |

## List of OAQPS and OECA NSPS And NESHAP Contacts (continued)
**(11/07/96)**

| Regulation - Part 63 | OAQPS Contact | Phone # | OC Contact | Phone # |
|---|---|---|---|---|
| NESHAP Subpart A: General Provisions | Jim Szykman | 919-541-2452 | Belinda Breidenbach | (202) 564-7022 |
| NESHAP Subpart F-H, The HON | Jan Meyer | 919-541-5254 | Jeff Kenknight | (202) 564-7033 |
| NESHAP Subpart L: Coke Oven Batteries | Amanda Agnew | 919-541-5268 | Maria Malave | (202) 564-7027 |
| NESHAP Subpart M: Perc Dry Cleaners | George Smith | 919-541-1549 | Joyce Chandler | (202) 564-7073 |
| NESHAP Subpart N: Chromium Electroplating | Lalit Banker / Phil Mulrine | 919-541-5420/ 919-541-5289 | Scott Throwe | (202) 564-7013 |
| NESHAP Subpart O: Ethyline Oxide Sterilizers | David Markwordt | 919-541-0837 | Karin Leff | (202) 564-7068 |
| NESHAP Subpart Q: Industrial Process Cooling Towers | Phil Mulrine | 919-541-5289 | Mimi Guernica | (202) 564-2415 |
| NESHAP Subpart R: Gasoline Distribution | Steve Shedd | 919-541-5397 | Julie Tankersley | (202) 564-7002 |
| NESHAP Subpart T:Halogenated Solvent Cleaning | Paul Almodovar | 919-541-0283 | Tracy Back | (202) 564-7076 |
| NESHAP Subpart U: Polymers & Resins Group I | Randy McDonald | 919-541-5402 | Sally Sasnett | (202) 564-7074 |
| NESHAP Subpart W: Epoxy Resins & Non-nylon Polymides | Randy McDonald | 919-541-5402 | Sally Sasnett | (202) 564-7074 |
| NESHAP Subpart X: Secondary Lead Smelters | Kevin Cavender | 919-541-2364 | Jane Engert | (202) 564-5021 |

| Regulation - Part 63 | OAQPS Contact | Phone # | OC Contact | Phone # |
|---|---|---|---|---|
| NESHAP Subpart Y: Marine Vessel Loading | David Markwordt | 919-541-0837 | Virginia Lathrop | (202) 564-7057 |
| NESHAP Subpart CC: Petroleum Refineries | Jim Durham | 919-541-5672 | Tom Ripp | (202) 564-7003 |
| NESHAP Subpart DD: Off-Site Waste & Recovery Operations | Michele Aston | 919-541-2363 | Ann Stephanos | (202) 564-7043 |
| NESHAP Subpart EE: Magnetic Tape Manufacture | Gail Lacy | 919-541-5261 | Seth Heminway | (202) 564-7017 |
| NESHAP Subpart GG: Aerospace | Jim Szykman | 919-541-2452 | Suzanne Childress | (202) 564-7018 |
| NESHAP Subpart II: Ship Building and Repair | Mohammed Serageldin | 919-541-2379 | Suzanne Childress | (202) 564-7018 |
| NESHAP Subpart JJ: Wood Furniture Manufacturing | Paul Almodovar | 919-541-0283 | Robert Marshall | (202) 564-7021 |
| NESHAP Subpart KK: Printing and Publishing | Dave Salman | 919-541-0859 | Ginger Gotliffe | (202) 564-7072 |
| NESHAP Subpart JJJ: Polymers & Resins Group IV | Bob Rosensteel | 919-541-5608 | Sally Sasnett | (202) 564-7074 |

# APPENDIX J

## Small Business Regulatory Enforcement Fairness Act (SBREFA)

# Chapter 4

## Development and Distribution of SBREFA Compliance Guides



## I. EPA'S APPROACH TO COMPLIANCE GUIDES

### A. What does SBREFA require?

1. When the Agency prepares a regulatory flexibility analysis for a final rule, SBREFA Section 212 also requires the Agency to:

   a. designate one or more publications regarding such a rule or group of rules as small entity compliance guides;

   b. explain in the guide actions a small entity must take to comply with a rule or group of rules; and

   c. distribute the guides to small entities through "comprehensive sources of information."

2. While compliance guides are not themselves judicially reviewable, they may be considered as evidence of the reasonableness or appropriateness of any penalties or damages in any civil or administrative action against a small entity. Accordingly, the statute gives us broad discretion with regard to implementation of these requirements for designation, development and distribution of the guides. The sections that follow describe how the Agency has chosen to exercise this discretion, the specifics of which may not necessarily be required by SBREFA. As we gain experience, we may issue additional guidance.

## B. What is the goal in writing a compliance guide?

The primary goal of the guide is to help small entities-- whether they are small businesses, communities or non-profits-- to comply with the regulation. You should therefore write your guide with your audience in mind and recognize that this segment of our regulated community may have trouble with standard government writing styles. We suggest that you write in plain and simple language insofar as possible. (While small entities are the primary audience for the guides, some of the compliance information may also be applicable to large entities and you may choose to present these similarities/differences as you develop your guide).

## C. Who participates in the development of the Guides?

1. The lead rule-writing office is responsible for developing the rule-specific compliance guide as part of the rulemaking process.

2. The regulatory development workgroup, as well as representatives from OECA, OGC, OSBO, OPPT's Pollution Prevention Division, and regional offices can also provide assistance/support, or develop sections of the guide, as appropriate. If your regulatory development workgroup is not represented by the appropriate offices, you should work through your Steering Committee representative to identify them.

3. Small entity representatives should typically be involved in reviewing the draft compliance guide after the rule is promulgated so that we have the benefit of their comments and advice in preparing the final version of the guide.

    a. With the exception stated below (b.), draft compliance guides should not be released to outside parties prior to the rule's promulgation.

    b. In those unusual circumstances where the outline of the compliance guide is clear to the lead program at the pre-proposal stage, then they may seek review and feedback from small entity stakeholders at that stage.

    c. You should share the draft compliance guide and solicit comment from small entity stakeholders after promulgation, but will need to balance such review with a commensurate concern for timely issuance of the guide.

## D. When should I begin developing the guide and when will it need to be completed?

1. You should integrate development of the guide into the rulemaking process. Generally, begin work on your guide as soon as you have enough information to do so. This point will vary from rule to rule; sometimes it is clear even before the rule is proposed, and in

other cases not enough is known until just prior to final promulgation. In either event, **you should not schedule additional time during the rulemaking process for development of the guide. The Agency will not ask for extension of any court deadlines in order to complete compliance guides.**

2. Keep in mind that the goal is to make the guide available after promulgation in sufficient time for it to be of practical help to small entities in evaluating and implementing their compliance options before the compliance deadline. You should make every effort to issue the guide within two months of the promulgation of the final rule.

## E. What are the other timing considerations in developing and issuing the Guide?

1. The constraints on outside participation during the final rule phase in development of the Guide leave a relatively short time after promulgation to both take comment from small entity stakeholders and issue the final Guide. This makes advance planning and drafting essential.

> ***Tip:*** Identify your small entity reviewers early in the process. You should consider using those small entity representatives who participated in the development of the proposed rule.

2. If the issuance of your guide may be delayed beyond a month or two, you should issue a Fact Sheet or other brief description of the rule as an interim measure.

3. If your rule has a distant compliance date (e.g., two years or more), you may want to re-issue the Guide closer to the compliance date.

## F. What sorts of questions should I ask my small entity reviewers?

Some suggestions include:

- Is the format appropriate?
- Is the guide clear and easy to read and understand?
- Does the guide accurately describe the rule as published?
- Is the guide useful in planning for compliance?

## G. How do I document development of the Guide?

1. If you are doing an Analytic Blueprint you should include plans for developing the guide, including a time line, and the resources needed. If there is no Blueprint, you should integrate it into your action or work plan.

2. When you submit your final rule to the Administrator for signature, you must also submit a schedule for development and completion of the compliance guide.

3. Include your distribution strategy for the guide in the Communications Plan. This is in addition to your notification plan for the announcement of the rule.

4. Ultimately, the lead office will input information related to the development of the guide into OPPE's Regulatory Information System, which is currently under development. Lead offices may also develop internal methods for tracking the development of the guides.

**H. What internal Agency concurrence do I need for the Guide and how do I get it?**

You need concurrence from both OGC and OECA. Normally, you will ask members of your workgroup from these offices to assure that appropriate levels of management in their offices approve the draft. (OGC and OECA will determine the level of concurrence they need within their offices). If you don't have OGC and/or OECA members on your workgroup, contact your Steering Committee representative who will obtain/identify contacts for you.

**I. When the Guide is in final form, who can help me with distribution?**

1. In addition to internal office distribution mechanisms, you should provide Guides to the Office of the Small Business Ombudsman, the Office of Regional and State/Local Relations, the Office of Communications, Education and Public Affairs. These offices will distribute the Guide to their small entity contacts. (You should assure, to the extent it is feasible, that these offices do not have duplicate distribution lists.)

2. Distribution must be consistent with the recommendations of the Enhanced Public Access Task Force.

3. Other small business assistance providers include:

- State Technical Assistance Programs for Pollution Prevention
- State Small Business Assistance Programs
- Small Business Development Centers
- Manufacturing Extension Partnership Centers funded by NIST
- Northeast Waste Management Officials Association
- Illinois Hazardous Waste Research and Information Center

- Waste Reduction Resource Center for the Southeast, and
- the Small Business Administration, USDA and OSHA

## J. How do we ensure that guides are kept up to date?

1. As a statutory matter, compliance guides may have evidentiary uses in litigation so it is important that guides be reviewed and revised as needed. It is the responsibility of the lead office to assure compliance guides are kept current. There is one case in which you must review an existing guide and several others when revisions may be desirable:

   a. Because we must generally review within ten years of promulgation any final rules for which we conducted regulatory flexibility analyses, the guide will be reviewed concurrently with the rule on or before the 10-year anniversary.

   b. Other circumstances which may occasion revisions include:

      - Changes in the rule which affect compliance

      - Comments from the public suggesting revisions, or from OECA based on their experience in enforcing the regulation. (See Appendix, Section C for instructions on soliciting customer feedback).

      - Litigation citing a guide as a reason to challenge the appropriateness of proposed penalties.

2. You should indicate in every guide that there may be subsequent revisions to the guide and include information about obtaining the revised guide. Place the most current guide in the appropriate docket, on a special section in EPA's internet page, or other electronic bulletin boards.

*Note: OECA may, at a later date, develop sector-specific, multimedia guides which would integrate rule-specific guides. OECA will notify program offices if and when it undertakes this project and will coordinate development of such guides through the Agency's Regulatory Steering Committee.*

## II. TEMPLATE FOR COMPLIANCE GUIDES

An Agency workgroup has developed the following template to help you in structuring your compliance guide, and you should use it in accordance with the guidance given earlier in the chapter. While SBREFA does not mandate a particular format, we urge you to adopt it so that we may have general consistency across the Agency and to assure that significant compliance

issues are adequately covered. If your rule does not, for some reason, lend itself to this template, you may use it as a checklist to ensure that all potentially relevant compliance issues are covered.

**The template is organized as follows:**

- Non-italicized text indicates sections which should normally be included in the compliance guide.

- We have also included standard language which you may choose to use if it is appropriate to your rule, and it is presented in *italics*. You should adapt this standard language to the specifics of your rule as necessary.

- Program offices have lead responsibility unless otherwise designated in **bold**.

Please make your best effort to write your guide in plain language using the guidance at http://www.blm.gov/nhp/NPR/plaineng.html.

[Insert standard publication header, including the date and appropriate publication number]

**SMALL ENTITY COMPLIANCE GUIDE**
**[insert title of rule or program...]**

## I. INTRODUCTION

*This document is published by the Environmental Protection Agency (EPA) as our official compliance guide for small entities, as required by the Small Business Regulatory Enforcement Fairness Act of 1996. Before you begin using the guide you should know that the information in this guide was compiled and published on [INSERT PUBLICATION DATE]. EPA is continually improving and upgrading its rules, policies, compliance programs, and outreach efforts. You can determine whether EPA has revised or supplemented the information in this guide by calling [INSERT HOTLINE NUMBER OR INTERNET ADDRESS].*

### A. Who Should Use this Guide?

1. To the extent possible, the guide should identify all the types/categories of small entities that will be subject to the rule's requirements. Bear in mind that other entities may be *indirectly* affected but may not be required to comply. This section needs to make this distinction clear to the reader.

   > *Tip:* Use the compliance table from the "Summary" section of your rule's preamble to convey this information. Be sure to modify it if necessary to target small entities.

2. In many cases, the guide will also be useful to larger entities subject to the rule. You may wish to point out any similarities or differences at this stage but you should not go into great detail on this subject.

### B. What does the Guide Cover?

### C. How do I use the Guide?

### D. How do I Obtain a Complete Copy of the Rule?

List an 800 number, *Federal Register* citation or the Government Information Locator Service.

## II. WHAT DOES THE REGULATION REQUIRE?

### A. What environmental/human health issue(s) does this rule address and why it is important?

### B. Summary of the New Regulation

1. Using plain English, summarize the rule in a narrative format. This should be a simplified adaptation of the issues you discussed in the rule's preamble.

2. Additionally, provide a visual description (e.g., chart or flowchart) of the rule's requirements as it applies to small entity operations or processes. "Operations" include traditional facility-based operations and non-traditional based operations such as farms, communities or schools.

### C. Compliance Timetable

Identify in easy-to-read format (e.g., flowchart, time line, timetable) compliance dates for notifications and other requirements.

### D. How Does this Regulation Relate to Other Federal, State, and Local Requirements?

1. Each Program should develop specific template language concerning program delegations and relationships to other requirements **generally**, or, where appropriate, referring back to general provisions applicable to all regulations in a subgroup to which the new regulation belongs (e.g., New Source Performance Standards under the Clean Air Act). Programs have the flexibility to expand this section as appropriate, to address this issue more **specifically**.

2. Meanwhile, here is suggested template language which may be appropriate in many cases:

> *This compliance guide explains your federal compliance obligations with respect to _____ rule. There may be other state or local requirements which apply to you which are different from, or more stringent than, the federal requirements. For example, some environmental statutes allow EPA to delegate environmental programs to a state. The state may then promulgate its own rules which may supersede the federal requirements. For more information on the rules that apply in your State, please contact [INSERT CONTACT POINT].*

## III. STEP-BY-STEP PROCEDURES FOR COMPLIANCE WITH THIS RULE

This is where you break down the rule into discrete subject areas using a step-by-step, question/answer approach. Questions in this section will depend on the particular rule. All the following questions are EXAMPLES of the types of questions that may be appropriate to include.

**A. How can I tell if I am subject to this rule?**

**B. What requirements am I subject to?**

**C. When do I need to comply ?** (elaborate on flowchart, as appropriate)

**D. What do I need to do to comply**?

Be sure to address such questions as:

- How does this rule affect my existing permit?
- How much will it cost to comply with this rule?

**E. What, when and how must I monitor or test?**

**F. What records do I need to keep and for how long?**

Include sample forms and calculations.

**G. What, when and to whom must I report?**

Include sample forms.

**H. How do I minimize harm if I think I am out of compliance? (Program lead/OECA support)**

**I. Where do I go for help**?

Give information on federal, State and local contacts, Agency hotlines, or State Small Business Assistance Program contacts.

**J. What is pollution prevention and how can it affect my operations**? **(OPPT lead)**

1. Discuss pollution prevention and its benefits, including how it may be used to help a facility/operation save money and/or possibly avoid regulation.

2. To the extent that there are other pollution prevention opportunities, including those which may make good business sense or could exempt a small entity from certain requirements, the program, with support from OPPT, has the option to expand this section and include this information.

**K. Are there opportunities for flexibility or waivers** ?

**If this is applicable** in a given rule, these opportunities can be highlighted here. For example, there are circumstances in which the Safe Drinking Water Act allows temporary variances or exemptions from maximum contaminant levels.

## IV. OPTIONAL QUESTIONS AND ANSWERS ABOUT FACILITY/OPERATIONS/PROCESSES

Here you want to anticipate questions of potential concern to the regulated community, including how the rule fits into the overall regulatory program. Questions will depend on the rule; the questions below are only EXAMPLES. [*Tip:* A self-audit checklist can be very helpful to small entities and may be used alone or in conjunction with a question and answer format.]

**A. How do I conduct a self-audit of my facility/firm/operation to help me evaluate whether I am in compliance with this rule?**

Provide Self-Audit Checklist **(Program/OECA)**

**B. What are the implications of this rule for my existing permits?**

Adapt this to your particular rule or program.

**C. How Does this Rule Change How I Handle/ Store Wastes?** (if guide were written for RCRA rule)

## V. THE COMPLIANCE ASSURANCE PROCESS (OECA LEAD)

This section should describe in clear, non-threatening terms why compliance is important, the potential consequences of violating the law, and how the entity can work with us to identify and correct its compliance problems, often without the need for a formal enforcement action or penalty.

Draft this section to ensure that small entities understand:

- how EPA determines compliance
- what they must do if they discover a violation, and
- the available compliance assistance/enforcement options.

Include only information that is directly relevant to the rule. You may attach more detailed information, or information you feel may be helpful, in an Appendix.

## A. How Is My Operation's Compliance With Environmental Requirements Determined?

Discuss compliance assistance, inspections, self-monitoring and the role of citizens.

## B. If I Discover a Violation, How Can I Work With The Agency to Correct It?

Discuss compliance incentives policies: Small Communities Policy, Policy on Compliance Incentives for Small Businesses, Self-Disclosure Policy.

## C. If the Agency Discovers a Violation, What Might Be Its Response?

*To maximize compliance, EPA implements a balanced program of compliance assistance, compliance incentives, and traditional law enforcement. EPA knows that small businesses which must comply with complicated new statutes or rules often want to do the right thing, but may lack the requisite knowledge, resources, or skills. Compliance assistance information and technical advice helps small businesses to understand and meet their environmental obligations. Compliance incentives, such as our Small Business Policy, encourage persons to voluntarily discover, disclose, and correct violations before they're identified by the government. EPA's strong law enforcement program protects all of us by targeting persons who neither comply nor cooperate to address their problems.*

*EPA uses a variety of methods to determine whether businesses are complying, including inspecting facilities, reviewing records and reports, and responding to citizen complaints. If we learn a person is violating the law, EPA (or a State, if the program is delegated) may file an enforcement action seeking penalties of up to $[INSERT STATUTORY MAXIMUM AMOUNT], per violation, per day. The proposed penalty in a given case will depend on many factors, including the number, length, and severity of the violations, the economic benefit obtained by the violator, and its ability to pay. EPA has polices in place to ensure penalties are calculated fairly. These policies are available to the public. In addition, any*

*company charged with a violation has the right to contest EPA's allegations and proposed penalty before an impartial judge or jury.*

*In summary, EPA recognizes that we can achieve the greatest possible protection by encouraging small businesses to work with us to discover, disclose, and correct violations. That's why we've issued self-disclosure, small business, and small community policies to eliminate or reduce penalties for small and large entities which cooperate with EPA to address compliance problems. In addition, we've established compliance assistance centers to serve over a million small businesses. For more information on these and other EPA programs for small businesses, please contact [INSERT POINT OF CONTACT].*

### D. What is the legal status of this guide?

*A judge can look at a compliance guide in determining what penalty is appropriate and reasonable, although the content of the guide cannot otherwise be reviewed by the court.*

*In this Compliance Guide, we have tried to make clear what you must do to comply with the applicable law and regulation. This is the minimum required by SBREFA. You'll notice, however, that here and there we have also included suggestions for alternative approaches that may make compliance easier and possibly even reduce costs. We hope you find this presentation of regulatory requirements useful and the additional information helpful in reaching and maintaining compliance.*

## APPENDIX

### A. Glossary of Environmental Terms

Define terms which are relevant to the rule but which may be too basic to be defined in the rule itself. For example, "permit," "pollution prevention," "process."

### B. Where to Obtain More Information

This section gives supplemental information. Examples might include other existing quality compliance guidance, pollution prevention guidance, pollution prevention case studies, other media contacts, trade associations, or university assistance programs.

### C. Questionnaire - How Useful Was This Guide?

Each guide should contain a brief questionnaire to solicit feedback from users as to the usefulness, readability, and improvements needed for the guide. Questionnaires will be returned to OPPE/RMD and then forwarded to the Agency contact. Please use the following page:

*Date:*_____

*Title of Rule or Program:*_____

*Name of Commenter (optional):*_____

*Please take a moment to let us know if you found this guide useful by answering the following questions. Thank you, your feedback is important to us.*

*1. I could easily understand what requirements I must meet.*_____

*2. The guide is written in understandable language.*_____

*3. The guide helped me understand the steps I must take to comply with the rule.*_____

*4. If you have suggestions to improve the guide, please indicate below:*

_____

_____

_____

_ _ _ _ _ Please fold on dashed line, affix postage and return by mail. Thank-you. _ _ _ _ _

Affix
Postage
Here

**U.S. EPA**
**Regulatory Management Division**
**Mail Code 2136**
**401 M St. SW**
**Washington, DC 20460**

# APPENDIX K

# Master Compliance Timeline for Part 63 NESHAP

## Methods for Compilation of the Draft Master Compliance Timeline

The Draft Master Compliance Timeline was developed from an OAQPS/ESD document that summarized milestone dates for each promulgated NESHAP listed in *40 CFR Part 63.* In general, the milestones are similar for each NESHAP. Where exceptions or unique milestones were an issue, the information was noted in the Timeline.

The milestone dates listed are the latest possible dates by which the action item must be completed. Thus, using the Secondary Lead Smelting NESHAP as an example, if an Owner/Operator of a Secondary Lead Smelting Facility schedules a Performance Test on November 20, 1997, instead of the latest possible date (stated in the standard) of December 20, 1997, the first Compliance Status Report must be submitted by January 19, 1998 (i.e., within the required 60 days) not on February 18, 1998.

Most NESHAPs follow the steps indicated in the table below, and these milestones are included in the Master Compliance Timeline.

| **ACTION ITEM** | **MILESTONE DATE**[a] |
|---|---|
| Effective Date | determined by the EPA |
| O/O: Initial Notification Due | within 120 days of the effective date |
| O/O: Submit Special Compliance Monitoring or Implementation Plans | varies by standard |
| EPA/State: Review/Approve Special Compliance Monitoring or Implementation Plans | varies by standard |
| O/O: Request for Compliance Extension | 12 months before the compliance date |
| EPA/State: Approval for Request of Compliance Extensions | 3 months after request |
| Compliance Date | 3 years after Effective Date |
| O/O: Notice of Performance Test | 30 days before Performance Test |
| EPA/State: Approval of Site-Specific Test Plan | Up to the Performance Test date |

| | |
|---|---|
| Performance Test | 180 days after Compliance Date |
| Compliance Status Reports | First one is due within 60 days of the Performance Test |
| Applicability Date for New Sources | determined by the EPA |

Source: Fruh, S., *Summary of Compliance Dates for Promulgated Part 63 MACT Regulations*, December, 1996.

O/O = Owner/Operator

[a] = Due to the various criteria for determining implementation dates under the Coke Ovens HAP, it was not included in the Master Compliance Timeline (with the exception of the Applicability Date for New Sources").

Because the following action items are only applicable to new sources (which are a small percentage of the currently regulated population), they were not included in the Master Compliance Timeline.

| **ACTION ITEM** | **MILESTONE DATE** |
|---|---|
| O/O: Application for Approval to Construct/Reconstruct a Major Emitting Source | determined by the Owner/Operator |
| EPA/State: Notice of Complete Information | 30 days from application |
| EPA/State: Approval or Disapproval of Construction/Reconstruction | 60 days from application |
| O/O: Notice of Intended Startup | 60 days before startup |

Source: Fruh, S., *Summary of Compliance Dates for Promulgated Part 63 MACT Regulations*, March, 1997.

O/O = Owner/Operator

**MASTER COMPLIANCE TIMELINE**

| TIMELINE CATEGORY | |
|---|---|
| **Applicability Date for New Sources** | |
| **Effective Date** | |
| **O/O: Initial Notification Due** | |
| **O/O: Submit Special Compliance Monitoring or Implementation Plans** | |
| **EPA/State: Review/Approve Special Compliance Monitoring or Implementation Plans** | |
| **O/O: Request for Compliance Extension** | |
| **EPA/State: Approval of Request for Compliance Extensions** | |
| **Compliance Date** | |
| **O/O: Notice of Performance Test** | |
| **EPA/State: Approval of Site-Specific Test Plan** | |
| **Performance Test** | |
| **Compliance Status Reports** | |

**O/O = Owner/Operator**

**MASTER COMPLIANCE TIMELINE**

| TIMELINE CATEGORY | |
|---|---|
| **Applicability Date for New Sources** | |
| **Effective Date** | |
| **O/O: Initial Notification Due** | |
| **O/O: Submit Special Compliance Monitoring or Implementation Plans** | |
| **EPA/State: Review/Approve Special Compliance Monitoring or Implementation Plans** | |
| **O/O: Request for Compliance Extension** | |
| **EPA/State: Approval of Request for Compliance Extensions** | |
| **Compliance Date** | |
| **O/O: Notice of Performance Test** | |
| **EPA/State: Approval of Site-Specific Test Plan** | |
| **Performance Test** | |
| **Compliance Status Reports** | |

**O/O = Owner/Operator**

**MASTER COMPLIANCE TIMELINE**

| TIMELINE CATEGORY | Nov-90 | Dec-90 | Jan-91 | Feb-91 | Mar-91 | Apr-91 | May-91 | Jun-91 | Jul-91 | Aug-91 | Sep-91 | Oct-91 | Nov-91 | Dec-91 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Applicability Date for New Sources** | ***11/15/90*** - Coke Ovens | | | | | | | | | | | | | ***12/9/91*** - Perchloroethylene Dry Cleaning Facilities |
| **Effective Date** | | | | | | | | | | | | | | |
| **O/O: Initial Notification Due** | | | | | | | | | | | | | | |
| **O/O: Submit Special Compliance Monitoring or Implementation Plans** | | | | | | | | | | | | | | |
| **EPA/State: Review/Approve Special Compliance Monitoring or Implementation Plans** | | | | | | | | | | | | | | |
| **O/O: Request for Compliance Extension** | | | | | | | | | | | | | | |
| **EPA/State: Approval of Request for Compliance Extensions** | | | | | | | | | | | | | | |
| **Compliance Date** | | | | | | | | | | | | | | |
| **O/O: Notice of Performance Test** | | | | | | | | | | | | | | |
| **EPA/State: Approval of Site-Specific Test Plan** | | | | | | | | | | | | | | |
| **Performance Test** | | | | | | | | | | | | | | |
| **Compliance Status Reports** | | | | | | | | | | | | | | |

**O/O = Owner/Operator**

**MASTER COMPLIANCE TIMELINE**

| TIMELINE CATEGORY | Jan-92 | Feb-92 | Mar-92 | Apr-92 | May-92 | Jun-92 | Jul-92 | Aug-92 | Sep-92 | Oct-92 | Nov-92 | Dec-92 | Jan-93 | Feb-93 | Mar-93 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Applicability Date for New Sources** | | | | | | | | | | | | ***12/31/92*** - SOCMI | | | |
| **Effective Date** | | | | | | | | | | | | | | | |
| **O/O: Initial Notification Due** | | | | | | | | | | | | | | | |
| **O/O: Submit Special Compliance Monitoring or Implementation Plans** | | | | | | | | | | | | | | | |
| **EPA/State: Review/Approve Special Compliance Monitoring or Implementation Plans** | | | | | | | | | | | | | | | |
| **O/O: Request for Compliance Extension** | | | | | | | | | | | | | | | |
| **EPA/State: Approval of Request for Compliance Extensions** | | | | | | | | | | | | | | | |
| **Compliance Date** | | | | | | | | | | | | | | | |
| **O/O: Notice of Performance Test** | | | | | | | | | | | | | | | |
| **EPA/State: Approval of Site-Specific Test Plan** | | | | | | | | | | | | | | | |
| **Performance Test** | | | | | | | | | | | | | | | |
| **Compliance Status Reports** | | | | | | | | | | | | | | | |

**O/O = Owner/Operator**

**MASTER COMPLIANCE TIMELINE**

| TIMELINE CATEGORY | Apr-93 | May-93 | Jun-93 | Jul-93 | Aug-93 | Sep-93 | Oct-93 | Nov-93 | Dec-93 | Jan-94 | Feb-94 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Applicability Date for New Sources** | | | | | ***8/12/93*** - Industrial Process Cooling Towers | | | ***11/29/93*** - Halogenated Solvent Cleaning | ***12/16/93*** - Chrome Electroplating | | ***2/8/94*** - Gasoline Distribution |
| **Effective Date** | | | | | | ***9/22/93*** - Perchloroethylene Dry Cleaning Facilities | ***10/27/93*** - Coke Ovens | | | | |
| **O/O: Initial Notification Due** | | | | | | | | | | | |
| **O/O: Submit Special Compliance Monitoring or Implementation Plans** | | | | | | | | | | | |
| **EPA/State: Review/Approve Special Compliance Monitoring or Implementation Plans** | | | | | | | | | | | |
| **O/O: Request for Compliance Extension** | | | | | | | | | | | |
| **EPA/State: Approval of Request for Compliance Extensions** | | | | | | | | | | | |
| **Compliance Date** | | | | | | | | | ***12/20/93*** - Perchloroethylene (Work Practice) | | |
| **O/O: Notice of Performance Test** | | | | | | | | | | | |
| **EPA/State: Approval of Site-Specific Test Plan** | | | | | | | | | | | |
| **Performance Test** | | | | | | | | | | | |
| **Compliance Status Reports** | | | | | | | | | | | |

**O/O = Owner/Operator**

**MASTER COMPLIANCE TIMELINE**

| TIMELINE CATEGORY | Mar-94 | Apr-94 | May-94 | Jun-94 | Jul-94 |
|---|---|---|---|---|---|
| **Applicability Date for New Sources** | ***3/7/94*** - Ethylene Oxide Commercial Sterilization Facilities<br>***3/11/94*** - Magnetic Tape Manufacturing | | ***5/13/94*** - Marine Tank Vessel Loading Operations<br>***5/16/94*** - Epoxy Resins and Non-Nylon Polyamides Production | ***6/6/94 -*** Aerospace Manufacturing and Rework Facilities<br>***6/9/94*** - Secondary Lead Smelting | ***7/15/94*** - Petroleum Refineries: Other Sources Not Directly Listed |
| **Effective Date** | | ***4/24/94*** - SOCMI | | | |
| **O/O: Initial Notification Due** | | | | ***6/18/94*** - Perchloroethylene Dry Cleaning Facilities | |
| **O/O: Submit Special Compliance Monitoring or Implementation Plans** | | | | | |
| **EPA/State: Review/Approve Special Compliance Monitoring or Implementation Plans** | | | | | |
| **O/O: Request for Compliance Extension** | | | | | |
| **EPA/State: Approval of Request for Compliance Extensions** | | | | | |
| **Compliance Date** | | | | | |
| **O/O: Notice of Performance Test** | | | | | |
| **EPA/State: Approval of Site-Specific Test Plan** | | | | | |
| **Performance Test** | | | | | |
| **Compliance Status Reports** | | | | ***6/18/94*** - Perchloroethylene (Work Practice) | |

**O/O = Owner/Operator**

**MASTER COMPLIANCE TIMELINE**

| TIMELINE CATEGORY | Aug-94 | Sep-94 | Oct-94 | Nov-94 | Dec-94 | Jan-95 | Feb-95 |
|---|---|---|---|---|---|---|---|
| **Applicability Date for New Sources** | | | ***10/13/94*** - Off-Site Waste and Recovery Operations | | ***12/6/94*** - Shipbuilding and Ship Repair Facilities<br>***12/6/94*** - Wood Furniture Manufacturing Operations NESHAP | | |
| **Effective Date** | | ***9/8/94*** - Industrial Process Cooling Towers | | | ***12/2/94*** - Halogenated Solvent Cleaning<br>***12/6/94*** - Ethylene Oxide Commercial Sterilization Facilities<br>***12/14/94*** -Gasoline Distribution<br>***12/15/94*** - Magnetic Tape Manufacturing | ***1/25/95*** - Chrome Electroplating | |
| **O/O: Initial Notification Due** | ***8/19/94*** - SOCMI | | | | | | |
| **O/O: Submit Special Compliance Monitoring or Implementation Plans** | | | | | | | |
| **EPA/State: Review/Approve Special Compliance Monitoring or Implementation Plans** | | | | | | | |
| **O/O: Request for Compliance Extension** | | | | | | | |
| **EPA/State: Approval of Request for Compliance Extensions** | | | | | | | |
| **Compliance Date** | | | ***10/24/94*** - window begins for Subpart H under SOCMI | | | | |
| **O/O: Notice of Performance Test** | | | | | | | |
| **EPA/State: Approval of Site-Specific Test Plan** | | | | | | | |
| **Performance Test** | | | | | | | |
| **Compliance Status Reports** | | | | | | | |

**O/O = Owner/Operator**

**MASTER COMPLIANCE TIMELINE**

| TIMELINE CATEGORY | Mar-95 | Apr-95 | May-95 | Jun-95 | Jul-95 | Aug-95 |
|---|---|---|---|---|---|---|
| **Applicability Date for New Sources** | ***3/14/95*** -Printing and Publishing<br>***3/29/95*** - Polymer & Resins Group IV | | | ***6/12/95*** - Polymers & Resins Group I | | |
| **Effective Date** | ***3/8/95*** - Epoxy Resins and Non-Nylon Polyamides Production | | | ***6/23/95*** - Secondary Lead Smelting | | ***8/18/95*** - Petroleum Refineries: Other Sources Not Directly Listed |
| **O/O: Initial Notification Due** | | ***4/8/95*** - Ethylene Oxide Commercial Sterilization Facilities<br>***4/14/95*** - Magnetic Tape Manufacturing | | | ***7/6/95 -*** Epoxy Resins and Non-Nylon Polyamides Production<br>***7/24/95*** - Chrome Electroplating | ***8/29/95*** - Halogenated Solvent Cleaning |
| **O/O: Submit Special Compliance Monitoring or Implementation Plans** | | | | | | |
| **EPA/State: Review/Approve Special Compliance Monitoring or Implementation Plans** | | | | | | |
| **O/O: Request for Compliance Extension** | | | | ***6/25/95*** - Chrome Electroplating (decorative) | | |
| **EPA/State: Approval of Request for Compliance Extensions** | | | | | | |
| **Compliance Date** | | | | | | |
| **O/O: Notice of Performance Test** | | | | | | |
| **EPA/State: Approval of Site-Specific Test Plan** | | | | | | |
| **Performance Test** | | | | | | |
| **Compliance Status Reports** | | | | | | |

**O/O = Owner/Operator**

**MASTER COMPLIANCE TIMELINE**

| TIMELINE CATEGORY | Sep-95 | Oct-95 | Nov-95 | Dec-95 | Jan-96 | Feb-96 | Mar-96 | Apr-96 |
|---|---|---|---|---|---|---|---|---|
| **Applicability Date for New Sources** | | | | | | | | |
| **Effective Date** | ***9/1/95*** - Aerospace Manufacturing and Rework Facilities<br>***9/19/95*** - Marine Tank Vessel Loading Operations | | | ***12/7/95*** - Wood Furniture Manufacturing Operations<br>***12/15/95*** - Shipbuilding and Ship Repair Facilites | | | | |
| **O/O: Initial Notification Due** | ***9/8/95*** - Industrial Process Cooling Tower | ***10/23/95*** - Secondary Lead Smelting | | | | | | |
| **O/O: Submit Special Compliance Monitoring or Implementation Plans** | | | | | | | | |
| **EPA/State: Review/Approve Special Compliance Monitoring or Implementation Plans** | | | | | | | | |
| **O/O: Request for Compliance Extension** | | | | ***12/15/95*** - Magnetic Tape Manufacturing (w/o new control device) | | | | |
| **EPA/State: Approval of Request for Compliance Extensions** | ***9/25/95*** - Chrome Electroplating (decorative) | | | | | | ***3/15/96*** - Magnetic Tape Manufacturing (w/o new control device) | |
| **Compliance Date** | | ***10/23/95*** - window ends for Subpart H under SOCMI | | | ***1/25/96*** - Chrome Electroplating (Decorative) | | ***3/8/96*** - Industrial Process Cooling Towers | |
| **O/O: Notice of Performance Test** | | | | | | | | |
| **EPA/State: Approval of Site-Specific Test Plan** | | | | | | | | |
| **Performance Test** | | | | | | | | |
| **Compliance Status Reports** | | | | | | | | |

**O/O = Owner/Operator**

**MASTER COMPLIANCE TIMELINE**

| TIMELINE CATEGORY | May-96 | Jun-96 | Jul-96 | Aug-96 | Sep-96 | Oct-96 |
|---|---|---|---|---|---|---|
| **Applicability Date for New Sources** | | | | | | |
| **Effective Date** | ***5/30/96*** - Printing and Publishing | | ***7/1/96*** - Off-Site Waste and Recovery Operations | | ***9/5/96*** - Polymers and Resins Group I<br>***9/12/96*** - Polymers and Resins Group IV | |
| **O/O: Initial Notification Due** | | ***6/13/96*** - Shipbuilding and Ship Repair Facilities | | | ***9/3/96*** - Wood Furniture Manufacturing Operations<br>***9/19/96*** - Marine Tank Vessel Loading Operations | ***10/28/96*** - Off-Site Waste and Recovery Operations |
| **O/O: Submit Special Compliance Monitoring or Implementation Plans** | | | | | | |
| **EPA/State: Review/Approve Special Compliance Monitoring or Implementation Plans** | | | | | | |
| **O/O: Request for Compliance Extension** | | ***6/25/96*** - Chrome Electroplating (hard & anodizing) | | | | |
| **EPA/State: Approval of Request for Compliance Extensions** | | | | | ***9/25/96*** - Chrome Electroplating (hard & anodizing) | |
| **Compliance Date** | | | | | ***9/23/96*** - Perchloroethylene Dry Cleaning Facilities | |
| **O/O: Notice of Performance Test** | ***5/24/96*** - Chrome Electroplating (decorative) | | | | | |
| **EPA/State: Approval of Site-Specific Test Plan** | | ***6/23/96*** - Chrome Electroplating (decorative) | | | | |
| **Performance Test** | | | ***7/23/96*** - Chrome Electroplating (decorative) | | | |
| **Compliance Status Reports** | | | | | | ***10/21/96*** - Chrome Electroplating (decorative)<br>***10/23/96*** - Perchloroethylene Dry Cleaners (control hardware) |

**O/O = Owner/Operator**

**MASTER COMPLIANCE TIMELINE**

| TIMELINE CATEGORY | Nov-96 | Dec-96 | Jan-97 | Feb-97 |
|---|---|---|---|---|
| **Applicability Date for New Sources** | | | | |
| **Effective Date** | | | | |
| **O/O: Initial Notification Due** | | ***12/16/96*** - Gasoline Distribution (also notification date, if using a screening equation) | | |
| **O/O: Submit Special Compliance Monitoring or Implementation Plans** | | ***12/16/96*** - Shipbuilding and Ship Repair Facilities<br>***12/23/96*** - Secondary Lead Smelting | | ***2/18/97*** - Petroleum Refining (for those choosing emissions averaging) |
| **EPA/State: Review/Approve Special Compliance Monitoring or Implementation Plans** | | | | |
| **O/O: Request for Compliance Extension** | ***11/21/96*** - Wood Furniture Manufacturing Operations (w/ sources emitting > 50 tons HAPs in 1996) | ***12/2/96*** - Halogenated Solvent Cleaning<br>***12/8/96*** - Ethylene Oxide Commercial Sterilization Facilities<br>***12/15/96*** - Magnetic Tape Manufacturing (w/new control device)<br>***12/16/96*** - Gasoline Distribution<br>***12/24/96*** - SOCMI | | |
| **EPA/State: Approval of Request for Compliance Extensions** | | | | ***2/21/97*** - Wood Furniture Manufacturing Operations (w/ sources emitting > 50 tons HAPs in 1996) |
| **Compliance Date** | | ***12/15/96*** - Magnetic Tape Manufacturing (w/o new control device) | ***1/25/97*** - Chrome Electroplating (hard & anodizing) | |
| **O/O: Notice of Performance Test** | | | | |
| **EPA/State: Approval of Site-Specific Test Plan** | | | | |
| **Performance Test** | | | | |
| **Compliance Status Reports** | | | | |

**O/O = Owner/Operator**

**MASTER COMPLIANCE TIMELINE**

| TIMELINE CATEGORY | Mar-97 | Apr-97 | May-97 | Jun-97 |
|---|---|---|---|---|
| **Applicability Date for New Sources** | | | | |
| **Effective Date** | | | | |
| **O/O: Initial Notification Due** | | | | |
| **O/O: Submit Special Compliance Monitoring or Implementation Plans** | | | | |
| **EPA/State: Review/Approve Special Compliance Monitoring or Implementation Plans** | ***3/22/97*** - Secondary Lead Smelting | | | ***6/18/97*** - Petroleum Refining (for those choosing emissions averaging) |
| **O/O: Request for Compliance Extension** | ***3/8/97*** - Epoxy Resins and Non-Nylon Polyamides Production | | | ***6/23/97*** - Secondary Lead Smelting |
| **EPA/State: Approval of Request for Compliance Extensions** | ***3/2/97*** - Halogenated Solvent Cleaning<br>***3/15/97*** - Magnetic Tape Manufacturing (w/new control device)<br>***3/16/97*** - Gasoline Distribution<br>***3/16/97*** - Shipbuilding and Ship Repair Facilities<br>***3/24/97*** -SOCMI | | | ***6/8/97*** - Epoxy Resins and Non-Nylon Polyamides Production |
| **Compliance Date** | | ***4/22/97*** - SOCMI F&G | | |
| **O/O: Notice of Performance Test** | | | ***5/14/97*** - Magnetic Tape Manufacturing (w/o new control device)<br>***5/25/97*** - Chrome Electroplating (hard & anodizing) | |
| **EPA/State: Approval of Site-Specific Test Plan** | | | | ***6/13/97*** - Magnetic Tape Manufacturing (w/o new control device)<br>***6/24/97*** - Chrome Electroplating (hard & anodizing) |
| **Performance Test** | | | | ***6/13/97*** - Magnetic Tape Manufacturing (w/o new control device) |
| **Compliance Status Reports** | | | | |

**O/O = Owner/Operator**

**MASTER COMPLIANCE TIMELINE**

| TIMELINE CATEGORY | Jul-97 | Aug-97 | Sep-97 | Oct-97 | Nov-97 |
|---|---|---|---|---|---|
| **Applicability Date for New Sources** | | | | | |
| **Effective Date** | | | | | |
| **O/O: Initial Notification Due** | | | ***9/1/97*** - Aerospace Manufacturing and Rework Facilities | | |
| **O/O: Submit Special Compliance Monitoring or Implementation Plans** | | ***8/12/97*** - Magnetic Tape Manufacturing (w/o control device: submitting a plan identifying parameters to be monitored for capture efficiency) | | | |
| **EPA/State: Review/Approve Special Compliance Monitoring or Implementation Plans** | | | | | |
| **O/O: Request for Compliance Extension** | | ***8/18/97*** - Petroleum Refineries: Other Sources Not Directly Listed | | | |
| **EPA/State: Approval of Request for Compliance Extensions** | | | ***9/17/97*** - Petroleum Refineries: Other Sources Not Directly Listed<br>***9/21/97*** - Secondary Lead Smelting | | |
| **Compliance Date** | ***7/31/97*** - Polymers & Resins I (Equipment Leaks)<br>***7/31/97*** - Polymers & Resins IV (Equipment Leaks) | | | | ***11/21/97*** - Wood Furniture Manufacturing Operations (w/ sources emitting > 50 tons HAPs in 1996) |
| **O/O: Notice of Performance Test** | | ***8/20/97*** - SOCMI F&G | | | |
| **EPA/State: Approval of Site-Specific Test Plan** | | | | | |
| **Performance Test** | ***7/24/97*** - Chrome Electroplating (hard & anodizing) | | ***9/19/97*** - SOCMI F&G | | |
| **Compliance Status Reports** | | ***8/12/97*** - Magnetic Tape Manufacturing (w/o new control device) | ***9/19/97*** - SOCMI F&G | ***10/22/97*** - Chrome Electroplating (hard & anodizing) | |

**O/O = Owner/Operator**

**MASTER COMPLIANCE TIMELINE**

| TIMELINE CATEGORY | Dec-97 | Jan-98 | Feb-98 | Mar-98 |
|---|---|---|---|---|
| **Applicability Date for New Sources** | | | | |
| **Effective Date** | | | | |
| **O/O: Initial Notification Due** | | | | |
| **O/O: Submit Special Compliance Monitoring or Implementation Plans** | ***12/10/97*** - Magnetic Tape Manufacturing (w/o control device: submitting an alternative limit when a coating operation is not occuring) | | | ***3/5/98*** - Polymers and Resins Group I (emissions averaging)<br>***3/12/98*** - Polymers and Resins Group IV (emissions averaging) |
| **EPA/State: Review/Approve Special Compliance Monitoring or Implementation Plans** | | | ***2/8/98*** - Magnetic Tape Manufacturing (w/o control device: submitting an alternative limit when a coating operation is not occuring) | |
| **O/O: Request for Compliance Extension** | ***12/7/97*** - Wood Furniture Manufacturing Operations (for sources emitting < 50 tons HAPs in 1996)<br>***12/16/97*** - Shipbuilding and Ship Repair Facilities | | | |
| **EPA/State: Approval of Request for Compliance Extensions** | | | | ***3/7/98*** - Wood Furniture Manufacturing Operations (for sources emitting < 50 tons HAPs in 1996) |
| **Compliance Date** | ***12/2/97*** - Halogenated Solvent Cleaning<br>***12/15/97*** - Gasoline Distribution<br>***12/15/97*** - Magnetic Tape Manufacturing (w/new control device)<br>***12/16/97*** - Shipbuilding and Ship Repair Facilities<br>***12/23/97*** - Secondary Lead Smelting | | | ***3/8/98*** - Epoxy Resins and Non-Nylon Polyamides Production |
| **O/O: Notice of Performance Test** | | ***1/1/98*** - Halogenated Solvent Cleaning | | |
| **EPA/State: Approval of Site-Specific Test Plan** | | | ***2/1/98*** - Halogenated Solvent Cleaning | |
| **Performance Test** | | | | ***3/2/98*** - Halogenated Solvent Cleaning |
| **Compliance Status Reports** | | ***1/21/98*** - Wood Furniture (< 50 tons HAP) | | |

**O/O = Owner/Operator**

**MASTER COMPLIANCE TIMELINE**

| TIMELINE CATEGORY | Apr-98 | May-98 | Jun-98 |
|---|---|---|---|
| **Applicability Date for New Sources** | | | |
| **Effective Date** | | | |
| **O/O: Initial Notification Due** | | ***5/30/98*** - Printing and Publishing | |
| **O/O: Submit Special Compliance Monitoring or Implementation Plans** | | | |
| **EPA/State: Review/Approve Special Compliance Monitoring or Implementation Plans** | | | |
| **O/O: Request for Compliance Extension** | | ***5/4/98*** - Aerospace Manufacturing and Rework Facilities<br>***5/30/98*** - Printing and Publishing | |
| **EPA/State: Approval of Request for Compliance Extensions** | | | ***6/30/98*** - Printing and Publishing |
| **Compliance Date** | | | |
| **O/O: Notice of Performance Test** | ***4/14/98*** - Gasoline Distribution<br>***4/20/98*** - Wood Furniture Manufacturing Operations (w/ sources emitting > 50 tons HAPs in 1996) | ***5/14/98*** - Magnetic Tape Manufacturing (w/new control device)<br>***5/15/98*** - Shipbuilding and Ship Repair<br>***5/21/98*** - Secondary Lead Smelting | |
| **EPA/State: Approval of Site-Specific Test Plan** | ***4/20/98*** - Wood Furniture Manufacturing Operations (w/ sources emitting > 50 tons HAPs in 1996) | ***5/14/98*** - Gasoline Distribution<br>***5/15/98*** - Shipbuilding and Ship Repair Facilities | ***6/13/98*** - Magnetic Tape Manufacturing (w/new control device)<br>***6/21/98*** - Secondary Lead Smelting |
| **Performance Test** | | ***5/21/98*** - Wood Furniture Manufacturing Operations (w/ sources emitting > 50 tons HAPs in 1996) | ***6/13/98*** - Gasoline Distribution<br>***6/13/98*** - Magnetic Tape Manufacturing (w/new control device)<br>***6/14/98*** - Shipbuilding and Ship Repair Facilities<br>***6/21/98*** - Secondary Lead Smelting |
| **Compliance Status Reports** | | ***5/2/98*** - Halogenated Solvent Cleaning | |

**O/O = Owner/Operator**

**MASTER COMPLIANCE TIMELINE**

| TIMELINE CATEGORY | Jul-98 | Aug-98 | Sep-98 |
|---|---|---|---|
| **Applicability Date for New Sources** | | | |
| **Effective Date** | | | |
| **O/O: Initial Notification Due** | | | |
| **O/O: Submit Special Compliance Monitoring or Implementation Plans** | | ***8/12/98*** - Magnetic Tape Manufacturing (w/o control device: submitting a plan identifying parameters to be monitored for capture efficiency) | ***9/5/98*** - Polymers and Resins Group I (pre-compliance report)<br>***9/12/98*** - Polymers and Resins Group IV (pre-compliance report) |
| **EPA/State: Review/Approve Special Compliance Monitoring or Implementation Plans** | ***7/5/98*** - Polymers and Resins Group I (emissions averaging)<br>***7/12/98*** - Polymers and Resins Group IV (emissions averaging) | | |
| **O/O: Request for Compliance Extension** | ***7/1/98*** - Off-Site Waste and Recovery Operations | | ***9/5/98*** - Polymers and Resins Group I (not for equip. leaks/compressors)<br>***9/12/98*** - Polymers and Resins Group IV (not for equip. leaks/compressors) |
| **EPA/State: Approval of Request for Compliance Extensions** | ***7/4/98*** - Aerospace Manufacturing and Rework Facilities | | |
| **Compliance Date** | | ***8/18/98*** - Petroleum Refineries: Other Sources Not Directly Listed (for those choosing emissions averaging and for floating roof storage vessels) | ***9/1/98*** - Aerospace Manufacturing and Rework Facilities |
| **O/O: Notice of Performance Test** | ***7/6/98*** - Epoxy Resins and Non-Nylon Polyamides Production | | ***9/17/98*** - Petroleum Refineries: Other Sources Not Directly Listed (those choosing emissions averaging) |
| **EPA/State: Approval of Site-Specific Test Plan** | | ***8/5/98*** - Epoxy Resins and Non-Nylon Polyamides Production | |
| **Performance Test** | | | ***9/4/98*** - Epoxy Resins and Non-Nylon Polyamides Production |
| **Compliance Status Reports** | ***7/19/98*** - Wood Furniture Manufacturing Operations (w/ sources emitting > 50 tons HAPs in 1996)<br>***7/30/98*** - Halogenated Solvent Cleaning | ***8/12/98*** - Gasoline Distribution<br>***8/12/98*** - Magnetic Tape Manufacturing (w/new control device)<br>***8/13/98*** - Shipbuilding and Ship Repair Facilities<br>***8/21/98*** - Secondary Lead Smelting | |

**O/O = Owner/Operator**

[a] According to a July 29, 1997 memorandu
Commercial Sterilization facilities is expect

**MASTER COMPLIANCE TIMELINE**

| TIMELINE CATEGORY | Oct-98 | Nov-98 | Dec-98 | Jan-99 |
|---|---|---|---|---|
| **Applicability Date for New Sources** | | | | |
| **Effective Date** | | | | |
| **O/O: Initial Notification Due** | | | | |
| **O/O: Submit Special Compliance Monitoring or Implementation Plans** | | | ***12/10/98*** - Magnetic Tape Manufacturing (with a control device: submitting an alternative limit when a coating operation is not occuring) | |
| **EPA/State: Review/Approve Special Compliance Monitoring or Implementation Plans** | ***10/5/98*** - Polymers and Resins Group I (pre-compliance report)<br>***10/12/98*** - Polymers and Resins Group IV (pre-compliance report) | | | |
| **O/O: Request for Compliance Extension** | | | | |
| **EPA/State: Approval of Request for Compliance Extensions** | ***10/1/98*** - Off-Site Waste and Recovery Operations<br>***10/5/98*** - Polymers and Resins Group I (not for equip. leaks/compressors) | | ***12/12/98*** - Polymers and Resins Group IV | |
| **Compliance Date** | | | ***12/7/98*** - Wood Furniture Manufacturing Operations (for sources emitting < 50 tons HAPs in 1996)<br>***12/8/98*** - Ethylene Oxide Commercial Sterilization Facilities[a] | |
| **O/O: Notice of Performance Test** | | | ***12/30/98*** - Aerospace Manufacturing and Rework Facilities | |
| **EPA/State: Approval of Site-Specific Test Plan** | | | | ***1/30/99*** - Aerospace Manufacturing and Rework Facilities |
| **Performance Test** | | | | |
| **Compliance Status Reports** | | ***11/3/98*** - Epoxy Resins and Non-Nylon Polyamides | | ***1/15/99*** - Petroleum Refineries: Other Sources Not Directly Listed |

**O/O = Owner/Operator**

[a] According to a July 29, 1997 memorandum from the Director of OAQPS, the compliance date for Ethylene Oxide Sterilization facilities is expected to move from December 8, 1997 to December 8, 1998

**MASTER COMPLIANCE TIMELINE**

| TIMELINE CATEGORY | Feb-99 | Mar-99 | Apr-99 | May-99 | Jun-99 | Jul-99 |
|---|---|---|---|---|---|---|
| **Applicability Date for New Sources** | | | | | | |
| **Effective Date** | | | | | | |
| **O/O: Initial Notification Due** | | | | | | |
| **O/O: Submit Special Compliance Monitoring or Implementation Plans** | | | | | | |
| **EPA/State: Review/Approve Special Compliance Monitoring or Implementation Plans** | ***2/8/99*** - Magnetic Tape Manufacturing (with a control device: submitting an alternative limit when a coating operation is not occuring) | | | | | |
| **O/O: Request for Compliance Extension** | | | | | | |
| **EPA/State: Approval of Request for Compliance Extensions** | | | | | | |
| **Compliance Date** | | | ***4/22/99*** - SOCMI (Wastewater) | ***5/30/99*** - Printing and Publishing | | ***7/1/99*** - Off-Site Waste and Recovery Operations |
| **O/O: Notice of Performance Test** | | | | ***5/6/99*** - Wood Furniture Manufacturing Operations (for sources emitting < 50 tons HAPs in 1996) | | |
| **EPA/State: Approval of Site-Specific Test Plan** | | | | ***5/6/99*** - Wood Furniture Manufacturing Operations (for sources emitting < 50 tons HAPs in 1996) | | |
| **Performance Test** | ***2/28/99*** - Aerospace Manufacturing and Rework Facilities | | | | ***6/7/99*** - Wood Furniture Manufacturing Operations (for sources emitting < 50 tons HAPs in 1996) | |
| **Compliance Status Reports** | ***2/7/99*** - Wood Furniture Manufacturing Operations (for sources emitting < 50 tons HAPs in 1996) | | ***4/28/99*** - Aerospace Manufacturing and Rework Facilities | | | |

**O/O = Owner/Operator**

**MASTER COMPLIANCE TIMELINE**

| TIMELINE CATEGORY | Aug-99 | Sep-99 | Oct-99 | Nov-99 | Dec-99 |
|---|---|---|---|---|---|
| **Applicability Date for New Sources** | | | | | |
| **Effective Date** | | | | | |
| **O/O: Initial Notification Due** | | | | | |
| **O/O: Submit Special Compliance Monitoring or Implementation Plans** | | | | | |
| **EPA/State: Review/Approve Special Compliance Monitoring or Implementation Plans** | | | | | |
| **O/O: Request for Compliance Extension** | | | | | |
| **EPA/State: Approval of Request for Compliance Extensions** | | | | | |
| **Compliance Date** | ***8/18/99*** - Petroleum Refineries (marine tank vessels not electing emissions averaging) | ***9/5/99*** - Polymers and Resins Group I (not for equip. leaks/compressors)<br>***9/12/99*** - Polymers and Resins Group IV(not for equip. leaks/compressors)<br>***9/19/99*** - Marine Tank Vessel Loading Operations | | | |
| **O/O: Notice of Performance Test** | | ***9/27/99*** - Printing and Publishing | ***10/19/99*** - SOCMI (Wastewater)<br>***10/27/99*** - Off-Site Waste and Recovery Operations | | |
| **EPA/State: Approval of Site-Specific Test Plan** | | | ***10/27/99*** - Printing and Publishing | ***11/28/99*** - Off-Site Waste and Recovery Operations | |
| **Performance Test** | | | ***10/20/99*** - SOCMI (Wastewater) | ***11/26/99*** - Printing and Publishing | ***12/28/99*** - Off-Site Waste and Recovery Operations |
| **Compliance Status Reports** | | | | | |

**O/O = Owner/Operator**

**MASTER COMPLIANCE TIMELINE**

| TIMELINE CATEGORY | Jan-00 | Feb-00 | Mar-00 | Apr-00 | May-00 |
|---|---|---|---|---|---|
| **Applicability Date for New Sources** | | | | | |
| **Effective Date** | | | | | |
| **O/O: Initial Notification Due** | | | | | |
| **O/O: Submit Special Compliance Monitoring or Implementation Plans** | | | | | |
| **EPA/State: Review/Approve Special Compliance Monitoring or Implementation Plans** | | | | | |
| **O/O: Request for Compliance Extension** | | | | | |
| **EPA/State: Approval of Request for Compliance Extensions** | | | | | |
| **Compliance Date** | | | | | |
| **O/O: Notice of Performance Test** | ***1/5/00*** - Polymers and Resins I<br>***1/12/00*** - Polymers and Resins IV<br>***1/17/00*** - Marine Vessel Tank Loading Operations | | | | |
| **EPA/State: Approval of Site-Specific Test Plan** | ***1/12/00*** - Polymers and Resins Group IV | ***2/5/00*** - Polymers and Resins I<br>***2/16/00*** - Marine Tank Vessel Loading Operations | | | |
| **Performance Test** | | ***2/5/00*** - Polymers and Resins Group I<br>***2/12/00*** - Polymers and Resins Group IV | ***3/17/00*** - Marine Vessel Tank Loading Operations | | |
| **Compliance Status Reports** | ***1/25/00*** - Printing and Publishing | ***2/5/00*** - Polymers and Resins Group I<br>***2/12/00*** - Polymers and Resins Group IV<br>***2/26/00*** - Off-Site Waste and Recovery Operations | | | ***5/16/00*** - Marine Tank Vessel Loading Operations |

**O/O = Owner/Operator**

# APPENDIX L

# MACTRAX

## MACTRAX

- Used by the Regional Offices to transfer information to OAQPS.
- Identifies which State/Locals (S/L) are implementing each MACT standard:
    - thru Title V delegation
    - thru implementation agreements
    - by Regional Office
- Each Title V program will have a MACTRAX screen per standard
- The information collected in MACTRAX for FY 1997 from S/L's with delegation authority will be voluntary.
- The information to be collected in MACTRAX was included for the performance measures for the Office of Air Research FY 1997-98 Implementation Plan.
- Regions are expected to incorporate performance measures in their FY 1998 State agreements which would include providing (or at least requesting) the MACTRAX reporting information for the end of the FY 1997 reporting cycle.
- The Region should identify the States that are not providing the information by adding a note in the comment field of the delegation screen.
- The regions can use the source-specific information available in AIRS Facility Subsystem (AFS) as the summary of the source category-specific information needed in MACTRAX. State delegation information, which is not provided through AFS, will still need to be entered into MACTRAX on the same time schedule.